CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2023-12-07836 (Please contact the lead agency for the project number. If associated to SEPA, please contact SEPA@dahp.wa.gov to obtain the project number before creating a new project.)

Author: Susan C. Larsen and Nicholas E. Gouette

Title of Report: CULTURAL RESOURCES ASSESSMENT OF THE WISEMARK COMMONS DEVELOPMENT PROJECT, ARLINGTON, SNOHOMISH COUNTY, WASHINGTON

Date of Report: December 4, 2023

County(ies): Snohomish Section: 14 Township: 31 North Range: 5 East E/W

Quad: Arlington West Acres: 4.91

PDF of Report uploaded to WISAARD report module (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) found or amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

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CULTURAL RESOURCES ASSESSMENT OF THE WISEMARK COMMONS DEVELOPMENT PROJECT, ARLINGTON, SNOHOMISH COUNTY, WASHINGTON

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DECEMBER 4, 2023

Report prepared for:

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Lead Agency: City of Arlington

Management Summary

On November 6, 2023, Legacy Anthropology was contacted by Michael Weinstein of Synthesis Interests, requesting an archaeological survey at 6804 204th Street Northeast (Parcel ID 31051400200600), within the limits of the City of Arlington, Snohomish County, Washington. There are plans to construct a mixed-use 150-unit community. This project lies within 85 feet of the Arlington Cemetery, and 1,200 feet from Ba Quab or Kent's Prairie. The lead agency for this project is the City of Arlington.

Planned Development within the Project Area includes a mixed-use 150-unit development. The development includes multi-family residential structures, a club house, a restaurant, parking lots, underground utilities, and a commercial building.

On November 20 and 21, 2023, Legacy Anthropology, LLC conducted an archaeological assessment, including pedestrian survey and subsurface testing, throughout the entire Project Area. The survey was conducted by Susan C. Larsen, M.A., who meets the Secretary of the Interior's Standards for a Professional Archaeologist, Nicholas E. Gouette, B.A., of Legacy Anthropology. On November 20 the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer, Kerry Lyste, visited the Project Area and examined one of the shovel tests. A total of 47 shovel tests were placed throughout the Project Area.

The sediment profile identified within the Project Area is consistent with the Everett very gravelly sandy loam. This unit has O, A, B, and C horizons formed within in it, which we identified within the subsurface profile. The sediment was also very gravelly and cobbly, which is also consistent with this unit. The appearance of soil horizons indicates that the subsurface within this parcel has undergone little development or ground disturbance in the past.

No protected cultural resources were identified during the archaeological survey of the Project Area. Based on the negative result and our consultation with the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer we recommend the following:

- **That this project proceed without further archaeological oversight**
- **That ground-disturbing work be conducted under the guidance of an Inadvertent Discovery Plan (Appendix 1), which should remain on site and be followed for the duration of this project.**
- **That the Affected Tribes continue to be consulted with at every step of this project**

Acknowledgements
We are grateful to Michael Weinstein of Synthesis Interests for obtaining our services for this project, and to Kerry Lyste of the Stillaguamish Tribe of Indians for his consultation.

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1.0 Introduction

On November 6, 2023, Legacy Anthropology was contacted by Michael Weinstein of Synthesis Interests, requesting an archaeological survey at 6804 204th Street Northeast (Parcel ID 31051400200600), within the limits of the City of Arlington, Snohomish County, Washington. There are plans to construct a mixed-use 150-unit community. This project lies within 85 feet of the Arlington Cemetery, and 1,200 feet from Ba Quab or Kent's Prairie. The lead agency for this project is the City of Arlington.

On November 20 and 21, 2023, Legacy Anthropology, LLC conducted an archaeological assessment, including pedestrian survey and subsurface testing, throughout the entire Project Area. The survey was conducted by Susan C. Larsen, M.A., who meets the Secretary of the Interior's Standards for a Professional Archaeologist, Nicholas E. Gouette, B.A., of Legacy Anthropology. On November 20 the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer, Kerry Lyste, visited the Project Area and examined one of the shovel tests. A total of 47 shovel tests were placed throughout the Project Area, and all were negative for cultural resources. No above ground cultural resources were identified either.

1.1 Area of Potential Effects

County	Snohomish
Property Owner	Goutam Jain, Vishal Singh, and Shri Ganesh LLC
Address	6804 204th Street Northeast, Arlington, Washington 98223
Parcel ID	31051400200600
UTM	Zone 10, 563999.74 m E, 5336686.99 m N
Lat/Long	48° 10' 48.84" N, 122° 08' 21.07" W
Township and Range	T 31 N, R 05 E, Section 14
USGS Quadrangle	2023 Arlington West 7.5'
Acreage	4.91

The Project Area is located at 6804 204th Street Northeast, within the limits of the City of Arlington, Snohomish County, Washington, in Section 14 of Township 31 North and Range 5 East (Figure 1 and Figure 2). It is located in the proximity to freshwater resources Portage Creek and the Stillaguamish River, on a remnant terrace. The Project Area is bound to the north by 204th Street Northeast, to the west by 67th Avenue Northeast, to the east by the Northern Pacific Railroad, and to the south by commercial parcels. The Project Area is adjacent to the historic Arlington Municipal Cemetery along its western edge. There is a remnant gravel driveway within the Project Area that used to serve a residential structure and an outbuilding. These historic structures no longer exist on the property.

1.2 Project Description

Planned Development within the Project Area includes a mixed-use 150-unit development. The development includes multi-family residential structures, a club house, a restaurant, parking lots, underground utilities, and a commercial building (Figure 3).

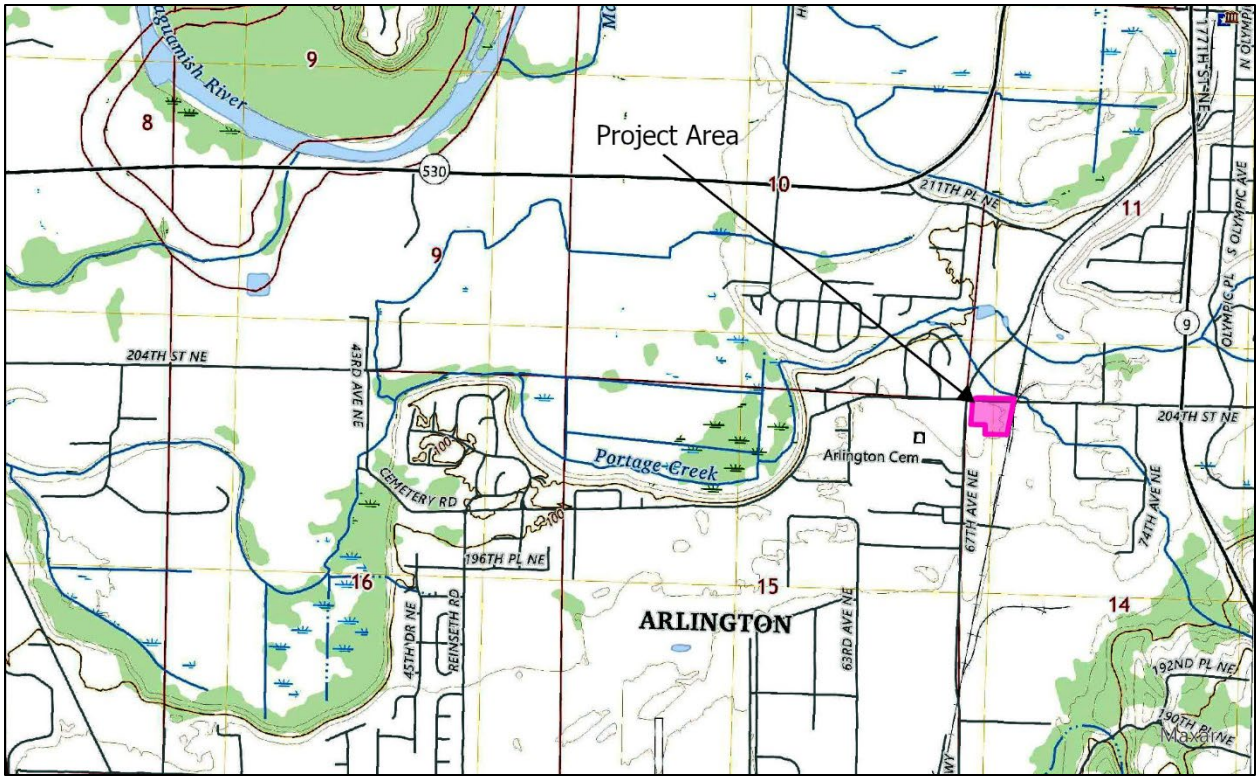

Figure 1.The Project Area in pink on a section of the 2023 Arlington West 7.5-minute quadrangle map (USGS 2023).

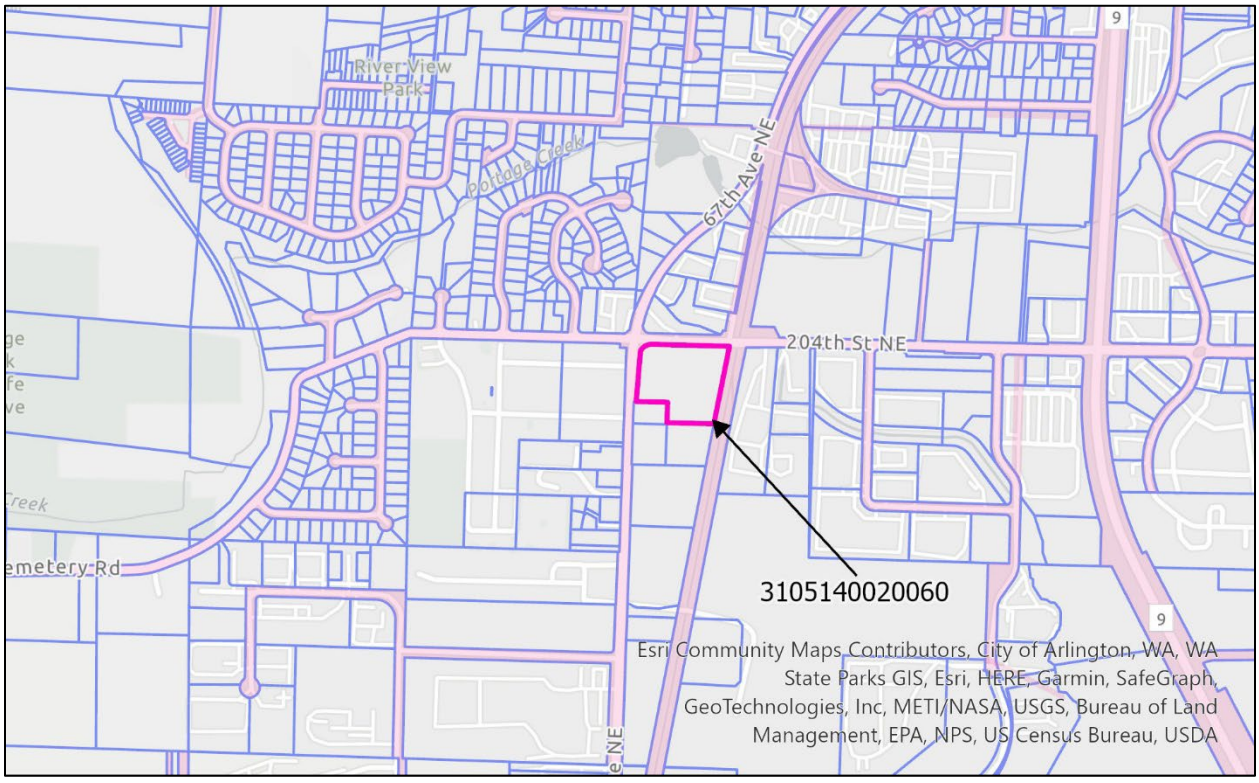

Figure 2. The Project Area on a Snohomish County Assessor's Parcel Map.

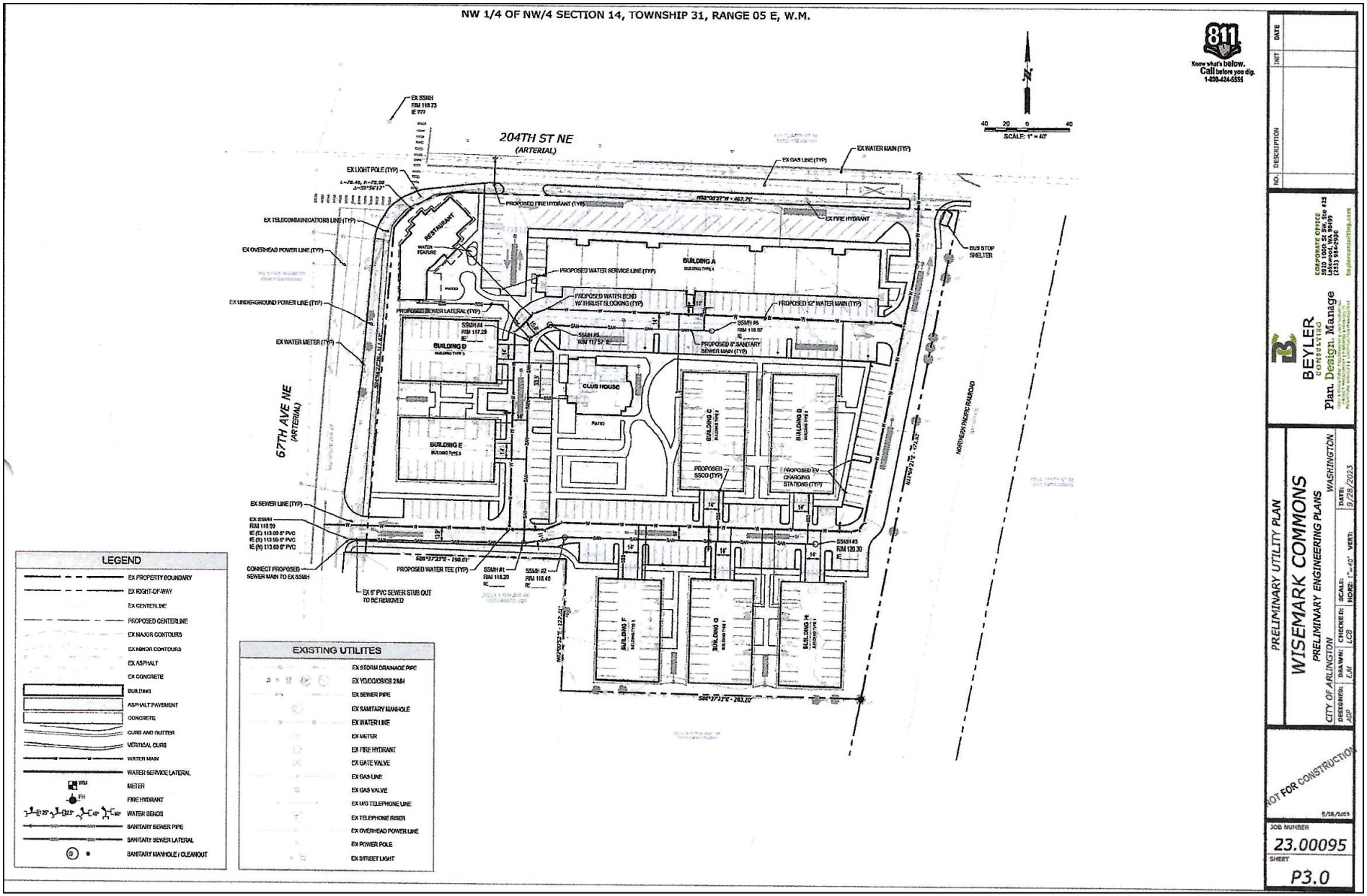

Figure 3. Preliminary Plans for the Wisemark Commons Development Project; plans courtesy of Beyler Consulting.

1.3 Regulatory Background

The lead agency for this project is the City of Arlington, making this project subject to the cultural resources protection regulations under the State Environmental Protection Act.

The State Environmental Protection Act (SEPA), Chapter 43.21C RCS, exists to help local and state agencies identify environmental impacts that may result from permits for private projects, construction of public facilities, and to help with adopting regulations and policies such as city comprehensive plan, critical ordinance area, or state water quality regulations. Under SEPA, the lead agency is responsible for identifying and evaluating potential adverse environmental impacts of a proposal. During the SEPA review, an environmental checklist about impacts to resources, including to archaeological, historic, and cultural resources (Question 13 on the SEPA checklist) is followed. Question 13 requires that the applicant review any buildings, structures, or sites that will be impacted by the project that are 45 years or older, or landmarks, features, or other evidence of Indigenous or historic use or occupation.

Additionally, the City of Arlington Municipal Code Chapter 20.98.220- Substantial Authority section (d)(D) states that the city designates and adopts from the State Environmental Protection Act as the basis for the city's exercise of authority to preserve important historic, cultural, and natural aspects of heritage.

1.4 Tribal Consultation

The Area of Potential Effects is located on the traditional land of the Muckleshoot Indian Tribe, Snoqualmie Tribe, Swinomish Indian Tribal Community, Stillaguamish Tribe of Indians, Suquamish Tribe, Sauk-Suiattle Tribe, and Tulalip Tribes. Tribal Historic Preservation Officers (THPO) and Cultural Resources staff were contacted regarding concerns about this project. Names of contacts are listed in Table 1.

Table 1. Affected Tribe contacts for Project consultation.

Contact	Affected Tribe
Laura Murphy, Archaeologist, Cultural Resources	Muckleshoot Indian Tribe
Steve Mullen-Moses, Director Adam Osbekoff, Cultural Resource Policy Manager	Snoqualmie Tribe
Josephine Jefferson, Tribal Historic Preservation	Swinomish Indian Tribal Community
Kerry Lyste, Tribal Historic Preservation Officer	Stillaguamish Tribe of Indians
Dennis Lewarch, Tribal Historic Preservation Officer	Suquamish Tribe
Kevin Joseph, Tribal Historic Preservation Officer	Sauk-Suiattle Tribe
Richard Young, Cultural Resources	Tulalip Tribes

On November 20, 2023, Kerry Lyste, THPO of the Stillaguamish Tribe of Indians conducted a site visit of the Project. Prior to the site visit, Kerry Lyste expressed his concern that unmarked graves may be present within the Project Area due to its proximity to the historic Arlington Municipal Cemetery

2.0 Environmental Setting

The environmental setting of an area has an influence on the location of cultural resources. Archaeological sites are often found in proximity to water resources and on habitable landscapes. Landscapes change over time due to depositional or erosional events that can alter habitability. The shape of the land can interfere with accessibility to resources, and over time a stable living surface can be buried by depositional events. Table 2 contains environmental information specific to the Project Area that shows the relationship between the land and the archaeological sites nearby.

Table 2. Environmental setting of the Project Area.

Elevation	119-114 feet (ft)
Slope Percent	1.3 %
Aspect	southwest
Distance to Water	100 ft south of Unnamed Tributary to Portage Creek
Geology	Marysville sand member (Qvrm)
Soils	Everett very gravelly sandy loam
Landforms	River terrace
Cultural Resources	45SN879 (0.45 miles north)

2.1 Geomorphology and Regional Depositional History

The Project Area is situated within the Puget Lowland region of Western Washington. This region was glaciated by a lobe of the Cordilleran Ice Sheet near the end of the Pleistocene Epoch. The glacial lobe created a depressional lowland between the Olympic and Cascade Mountains, extending south as far as the Chehalis River near Olympia to the south (Thorson 1980). Within the last two million years Earth has undergone at least 20 cooling and warming cycles, where temperatures fluctuated 10° C (50° F), causing the growth and recession of glaciers (Wicander and Monroe 2010:360).

The Quaternary Period is marked by the start of the Pleistocene Epoch, also known as the Ice Age, 1.8 million years ago. Four major cooling periods have been identified in North America within the Pleistocene: the Wisconsinan, Illinoian, Kansan, and Nebraskan Glaciations (Wicander and Monroe 2010:359). These periods represent major glacial advances, with episodes of warming between each one. The most recent cooling period, the Wisconsinan lasted from between 70-90 thousand years ago (ka) to 10 ka, reaching its maximum between 21 and 18 ka. The end of this cooling period marks the start of the Holocene Epoch (Easterbrook 1999:370; Grotzinger and Jordan 2010:590; Wicander and Monroe 2010:356).

During the glacial periods of the Quaternary, the Cordilleran Ice Sheet— one of two continental ice sheets covering North America— advanced and retreated along the west coast of Canada, moving from southeastern Alaska south to the states of Washington and Montana (Booth *et al.* 2004). Six major advances have been identified: Early Pleistocene glaciations (Orting, Stuck, and Salmon Springs) and Late Pleistocene glaciations (Double Bluff, Possession, and Fraser) (Booth *et al.* 2004:23; Easterbrook 1992, Troost 2016:121). The Fraser Glaciation is correlated with the Late Wisconsinan cooling period and is made up of multiple stades: the Evans Creek Stade (25–15 ka), the Vashon Stade (13.6–16 ka), the Everson Interstade, and the Sumas Stade (11.3–10 ka). The Vashon Stade represents the maximum advance of the Cordilleran Ice Sheet during the Fraser Glaciation, followed by the Everson Interstade, and a brief glacial advance during the Sumas Stade (Blunt *et al.* 1987; Booth *et al.* 2004:23; Easterbrook 1992; Thorson 1980).

With each glacial cycle, the Puget Lowland was shaped by the carving of glacial advance and the deposition of sediment with glacial melting. The weight of the Puget Lobe's glacial ice caused the Earth's crust to depress into the mantle, lowering its elevation. Since the retreat of the Puget Lobe, at the end of the Sumas Stade, the Puget Lowland has been slowly rebounding (Booth *et al.* 2004). As a glacier advances, it abrades from the bottoms and sides of valleys, picking up sediment. This sediment is carried on top of the glacier and within it. The sediments include clasts-sizes from boulders to very fine sediments eroded from rocks scraping the ground below the glacier (Grotzinger and Jordan 2010:237). As a glacier starts to melt, the entrained sediment load gets deposited in distinct ways. Glacial till is deposited directly due to the glacier melting in place. Till deposited into a body of water is water-laid till (Grotzinger and Jordan 2010: 239). Till deposits generally consist of a heterogeneous load of rock and sediment clasts of all sizes. Glacial outwash is sediment deposited by meltwater streams that form at the toe of the glacier as it melts (Grotzinger and Jordan 2010: 585). Large outwash plains blanket the southern Puget Lowland south of Tacoma and Olympia, and west of Shelton. Another large outwash plain exists in the northeast Puget Lowland.

2.2 Arlington Environmental History

The Project Area is located on an old terrace of the Stillaguamish River mainstem. The Stillaguamish River basin has been shaped by a combination of glacial and fluvial activities. The Stillaguamish River mainstem originates at the Arlington Junction, at the confluence of the North Fork and South Fork Stillaguamish River and flows westward to its terminus at Port Susan.

2.2.1 Depositional and Geomorphic History

The entire Stillaguamish River drains an area of 1,800 square kilometers (km) of area within the North Cascades and the Puget Lowland (Nowacki and Grossman 2020). The river is made up of a North Fork and a South Fork that converge at the Arlington Junction into the westward flowing Stillaguamish Mainstem. The Mainstem is 28 kilometers long from its confluence to Port Susan, where the Stillaguamish River discharges into the Puget Sound. The North and South Forks of the Stillaguamish have incised into Cascade Range bedrock, originally cut by the alpine glaciers of the Puget Lobe of the Cordilleran. Downstream of the mountains, within the Puget Lowlands, the Stillaguamish River has found a path through sequences of advance outwash, glacial till, and retreat outwash (Anderson *et al.* 2017; Benda *et al.* 1992; Booth *et al.* 2003). Incising by the Mainstem Stillaguamish River has created escarpments through glacial drift within the Puget Lowland, while also contributing its own geologic deposits. Within the Project Area, younger alluvium overlies the glacial drift (Booth *et al.* 2003).

2.2.2 Local Geology and Soils

Soils are classified based on the horizonal layers that develop over time through various soil-forming processes, labelled O, A, E, B, or C (Boggs 2012:14). Each of these layers contains a distinctive chemistry through weathering processes, and the transport of particles downward by water infiltration. The soil texture is determined by the clast sizes within it. Clasts are divided by size into classifications like gravel, sand, silt, clay. Sand and silt are large enough that they can be made up of whole minerals. Clay is a very fine particle size that is made up of either fine minerals, called phyllosilicates, or the eroded parts of minerals usually larger than clay that have been ground into a clay-sized particle through glacial activity (Boggs 2012:14; Schaetzl and Anderson 2005:9–11). A soil that is largely dominated by a particle size is named by that clast, like sand. A soil that is not dominated by either of the particle sizes is called a loam. A loam can also be called a clay loam or silt loam, for example, if the soil sample appears to have more of one particle size but is not largely dominated by it (Schaetzl and Anderson 2005:11–12).

The Project area is situated within a deposit of the Marysville Sand Member (*Qvrm*) consisting of well-drained outwash sand that is stratified to massive and contains some fine gravels, silt, and clay. It was deposited by meltwater during the receding of the Vashon Glacier. The unit is underlain by glacial till (Minard 1985). The Project Area also overlaps with the Everett very gravelly sandy loam. This unit forms in kames, moraines, and eskers, and consists of a very gravelly sandy loam to approximately 35 inches, overlying an extremely cobbly coarse sand. It has defined O, A, B, and C soil horizons (Soil Survey Staff 2020).

2.3 Current and Historical Vegetation

In the last 20,000 years, the Puget Lowland environment has shifted from cold glacial to warming in the Holocene. With the warming, new plant communities have formed. From 21 to 17 ka, during the advance and retreat of the Puget Lobe, the Puget Trough housed grass, sedge (family: Cyperaceae), a diverse array of plants from the genus *Artemisia*, tundra herbs, and tree species Engelmann spruce (*Picea engelmannii*), lodgepole pine (*Pinus contorta*), subalpine fir (*Abies lasiocarpa*), and Pacific yew (*Taxus brevifolia*). During this time temperatures within the Puget Trough were between 5–7 degrees Celsius (C) colder than today (Whitlock 1992). Between 16-15 ka, the southern Puget Trough was approximately 2–6 degrees C, which supported a plant community made up of Sitka spruce (*Picea sitchensis*), Engelmann spruce, and mountain hemlock (*Tsuga mertensiana*) (Whitlock 1992). As the glaciers continued to retreat the Puget Trough became home to evergreen coniferous trees from genus *Pseudotsuga*, red alder (*Alnus rubra*), and ferns from the genus *Pteridum*. Between 5–6 ka, the wet environment allowed for the spread of coniferous trees from the genus *Thuja*, Western hemlock (*Tsuga heterophylla*), Sitka spruce (*Picea sitchensis*), and Western white pine (*Pinus monticola*), which become more common later in the Holocene (Whitlock 1992).

2.4 Stillaguamish River Watershed

The Project Area is located within the Department of Ecology's Water Resource Inventory Area 5 (WRIA 5), Stillaguamish Watershed. The Stillaguamish Watershed lies between the Lower Skagit and Snohomish Watersheds to the north and south. The watershed encompasses the North and South Fork Stillaguamish rivers and their tributaries, and the Lower Mainstream Stillaguamish, where the North and South Forks converge to the west of Arlington and drain into the Puget Sound. The watershed is 700 square mi. in area, and extends from sea level, east to and elevation of 6,854 ft. above sea level. The watershed experiences recharge with 150 in. of annual rainfall at the higher elevations (Encyclopedia of Puget Sound 2023).

2.5 Arlington Natural Resources

Wetlands are an abundant natural resource near the Stillaguamish River. Historically, the area has contained approximately 29,133 acres of wetlands, but only has about 6,266 acres of remaining wetlands that are degrading. Loss of wetlands surrounding the Stillaguamish River has occurred because of the expansion of agriculture, urban expansion, forestry, and invasive plants and animals (Scofield and Pope 2019).

Fish remain an important resource in the Stillaguamish River. The populations of fish, especially salmon, have been in decline, including the chinook, pink, coho, chum, and steelhead that historically spawn in the river. The Stillaguamish Tribe of Indians operates two fish hatcheries to increase supplies of salmon in the Stillaguamish River (Stillaguamish Tribe of Indians 2020a). Fish species typically identified in the area include chum salmon (*Oncorhynchus keta*), coho salmon (*Oncorhynchus kisutch*), Steelhead trout (*Oncorhynchus mykiss*), sea run cutthroat trout (*Oncorhynchus clarkia clarkii*), and resident trout (WDFW 2023).

3.0 Cultural Setting

Archaeology is a discipline that has long benefitted, socially and economically, on the cultural history of the Indigenous people of North America. Archaeologists have historically controlled the academic narrative about Indigenous cultures and identities (Atalay 2006). To Indigenous people, time is not always thought of on a linear scale, although archaeology is frequently recorded in a linear way without the input of Indigenous people (Colwell-Chanthaphonh, *et al.* 2010). As such, we acknowledge that the following accounts of Coast Salish history are mostly those of non-Indigenous archaeologists with little to no input by Indigenous people.

3.1 Coast Salish Life Prior to Colonization

Prior to the arrival of colonial settlers to the Northwest Coast, Coast Salish Indigenous people thrived in the years following the Vashon Stade in a resource-rich environment. According to the archaeological record, Coast Salish people lived in socially stratified societies with dense populations and hunter-gatherer, household-based economies. Archaeologists have studied the material cultural of Coast Salish people as a culture area defined by language grouping, extending from southern Alaska to the Oregon Coast.

Coast Salish people hunted, fished, and collected a wide variety of plant material for food and skilled crafts. Their technology included bone and antler working, woodwork, ground stone, and flaked lithics. The Coast Salish people were extremely skilled at woodworking, constructing timber houses, canoes, monumental art, containers, and basketry. Permanent winter villages were commonly used by the same groups of people every year, with large, kin-based households, and food stored from earlier hunting and gathering seasons (Ames and Maschner 1999:13–48; Matson and Coupland 1995:2–25). Based on archaeological data, the period between glaciation and the present has been broken into a linear timescale for purposes of academic study.

The Archaic Period, named by archaeologists, began during the Everson Interstade (13.6–11.3 thousand years BP), continued during the last, minor glaciation of the Puget Lowland— the Sumas Stade (11.3–10 thousand years BP)—, and advanced into the Holocene (10,000 years BP to present). Due to the age of this period, many places people lived are now underwater or covered in dense vegetation in the uplands. A large coastal plain existed south of the Puget Sound prior to 10,000 years BP, when the sea levels started to rise rapidly as the glaciers receded. The end of the Pleistocene was marked by a warmer climate and migrating plants and animals (Ames and Maschner 1999:67–123).

By 6,400 years BP the climate cooled slightly, as sea levels stabilized to near modern levels. During this period, archaeologists have found some of the earliest shell middens known to science. (Ames and Maschner 1999:88). Shell middens can range in size up to over thousands of square meters. The dense concentration of shell creates an alkaline environment that preserves bone and antler but not plant material (Ames and Maschner 1999:89–93). Early Pacific Coast Salish people created carving tools, spoons, and stones adorned with motifs of people, mammals, birds, backbones, and ribs (Ames and Maschner 1999:228–229).

The Middle Pacific Period is marked by evidence of plank houses and villages. Plank houses are indicative in archaeology of a more permanent dwelling (Ames and Maschner 1999:93). Coast Salish people during this time fished for salmon, using bone and antler tools and composite toggling harpoons to hunt sea otters, seals, and whales (Ames and Maschner 1999:93). Some of the recorded archaeological sites within the Gulf of Georgia region show distinction from one another, so archaeologists have divided the Middle Pacific into two phases based on these characteristics: The Locarno Beach Phase and the Marpole Phase.

A warmer and drier period from 850 to 700 years BP was followed by the Little Ice Age, a wetter and colder interval after 650 BP (Ames and Maschner 1999:94). Coast Salish people created ground slate points and blades that were smaller and triangular at this time. Houses during this period were sometimes constructed with ditches and embankments (Ames and Maschner 1999:106–107). At about 500 BP, the archaeological record shows Coast Salish people used more bone tools than lithics, and single-row house villages are more commonly identified by archaeologists (Ames and Maschner 1999:160).

3.1.1 People of the Arlington Area Prior to Colonization

The Project Area is within the traditional territory of the Southern Coast Salish people including, but not limited to, the stuləgʷábš (Stillaguamish), saʔqʷəbixʷ-suyaƛ̓ʔbixʷ (Sauk-Suiattle), and Tulalip Tribes, made up of the sduhúbš (Snohomish), sdukʷálbixʷ (Snoqualmie), sqáʒət (Skagit), Samish, in addition to the Stillaguamish and Suiattle (Sauk-Suiattle Indian Tribe 2022; Stillaguamish Tribe of Indians 2020b; Suttles 1990; Tulalip Tribes 2016).

The Southern Coast Salish were Lushootseed speakers who were seasonal hunter-gatherers. They lived in permanent winter villages (Suttles and Lane 1990). Permanent villages contained longhouses 100 to 200 feet in length, made from cedar planks, carved house posts, shed roofs, with cattail mats for insulation (Stillaguamish Tribe of Indians 2020b; Tulalip Tribes 2016). In the spring, summer, and fall, they moved up and down the rivers and their tributaries to utilize fish runs, game patterns, and crop yields. Seasonal camps were often assembled and disassembled in permanent locations that were known to large groups of families (Bruseth 1972:7; Stillaguamish Tribe of Indians 2020b). Temporary mat houses were set up in the seasonal locations. The houses were made from cattails over pole supports (Tulalip Tribes 2016).

Canoes were constructed for different uses: the Trolling Canoe was for a single person, the Large Canoe could hold between six and 15 people, and were primarily used for travelling, and the Shovel-Nose Canoe was a flat-bottomed canoe with a similar bow and stern used for travel and fishing in the rivers (Tulalip Tribes 2016).

Fish were a staple food, including salmon, steelhead, sturgeon, smelt, herring, trout, and cod (Tulalip Tribes 2016). Weirs, traps, trawl nets, dip nets, gaff hooks, harpoons, and leisters were all used in the river and its tributaries to procure fish. Deer, elk, waterfowl, shellfish, and small mammals were all hunted to supplement their diet, using bow and arrows, deadfalls, snares, spears, and nets. Other foods included sprouts, roots and bulbs, berries, and nuts (Bruseth 1972, Stillaguamish Tribe of Indians 2020b; Suttles and Lane 1990; Tulalip Tribes 2016).

A 1926 deposition by James Dorsey (Quil-Que-Kadam), a stuləgʷábš man who lived on the Stillaguamish River his entire life, detailed stuləgʷábš villages according to his own recollection and accounts told to him by elders. James Dorsey was born in 1850 and gave the deposition at age 76. He did not speak English, so his words were translated. James Dorsey's account of life on the Stillaguamish River is among the oldest recorded by Euro-descended settlers. He recalled villages, cemeteries, and fishing locations along the Stillaguamish River, as the stuləgʷábš people lived relatively undisturbed until the 1870s (Lane 1973). Some of the villages from James Dorsey's account are in Table 3.

Table 3. Locations and descriptions of Indigenous villages and places near the Area of Potential Effects.

Village Location	Translated Place Name	Description	Reference
Kent's Prairie	Ba Quab	Open, dry land	Bruseth 1972
Jim Creek	Klatsko	Closed in or folded up	Bruseth 1972
South Fork Stillaguamish	Chawitch	Name for South Fork Stillaguamish	Bruseth 1972
Near present-day Florence	Kal-cud	Located in T32N, R4E, S30, village of three houses, two of which on Lot 11 were occupied by five families each, and one occupied by several families situated on Lot 12	Lane 1973: Appendix 1
Across river to south from Kal-cud	Cub-ial	Located in T32N, R4E, S30, village several homes with 400 people living there, situated on Lots 2 and 3, included burial ground	Lane 1973: Appendix 1
Near 8200 and 8220 Thomle Road, Stanwood	Lo-Al-Ko	Located in T32N, R4E, S30, south side of Stillaguamish River branch, village of one large house with five families, located on Lots 5 and 6	Lane 1973: Appendix 1
Between Church Creek and Rydjord Rd.	Sel-ta-ch	Located in T32N, R4E, S29, north side of Stillaguamish River, village of three houses shared by 200 people, situated on Lot 1, included a burial ground	Lane 1973: Appendix 1
Warm Beach	Sp-la-tum	Located in T31N, R3E, S13, village of one large house, a small house, and several smaller cabins, situated on Lots 3 and 4	Lane 1973: Appendix 1
Between Florence and Silvana	Not given	Located in T31N, R4E, S4, village of 100 people, including one big house	Lane 1973: Appendix 1
Hat Slough	Not given	Four miles south of Stanwood, two large houses, occupied by about 100 people	Lane 1973: Appendix 1
Near Arlington	Tebushan	Village northwest of Arlington	Kerry Lyste, per. com., 2023
Arlington Junction	Skabalko	Village of two large houses, occupied by several hundred people, included a cemetery	Bruseth 1972; Lane 1973: Appendix 1
Confluence of Pilchuck Creek and Stillaguamish River	Tolidachub	Village located on the terraces above the confluence of the Stillaguamish River and Pilchuck Creek; was continuously occupied for over 8,000 years	Kerry Lyste, per. com., 2023
Near present-day Stanwood	Zis-aba	Village of three houses occupied by about 250 people, included a cemetery	Lane 1973: Appendix 1
Near Trafton	Hak ch losid	Located in T32N, R6E, S20, four large buildings, including a smoke house, included a burial ground	Bruseth 1972; Lane 1973: Appendix 1

3.2 European Contact and the Treaty of Point Elliot

Life for the Coast Salish changed drastically after contact with European settlers. The introduction of European diseases, tools, material types, religion, and lifestyle all had great repercussions to the Coast Salish's way of life. On January 22, 1855, The Treaty of Point Elliott concluded with 82 chiefs and headmen representing Tribes in the northern area to the international boundary with Canada. Hundreds of members of the Duwamish, Suquamish, Snoqualmie, Snohomish, Stillaguamish, Swinomish, Skagit, Lummi, and others were present for the Treaty Council (Marino 1990). The treaty established the Tulalip, Swinomish, Lummi, and Port Madison Reservations. This required that Indigenous people give up most of their ancestral land in exchange for the Reservations, the right for fishing in usual and accustomed grounds and stations, and $150,000 paid over 20 years. Many Indigenous people did not relocate to the reservations and remained in their traditional lands, including, but not limited to, the Stillaguamish, Samish, Duwamish, Snoqualmie, Snohomish, Upper Skagit, and the Sauk and Suiattle people (Marino 1990).

3.3 Historic Arlington

The Project Area is located within the city limits of the City of Arlington, approximately four miles southwest of the convergence of the North Fork and South Fork of the Stillaguamish River. The first European-descended settlers to arrive to present-day Arlington in 1851, were prospectors looking for ore in the river. A rough wagon road was constructed following the trail that brought settlers from Marysville, opening the area for more arrivals. The first store was situated near the river fork and was opened in 1887 by Nels K. Tyete and Nils C. Johnson. The White House Hotel opened the same year. In the spring of 1890, two towns were platted near each other, Arlington and Haller City. In 1903 the City of Arlington incorporated both towns after Haller City businessmen agreed that Arlington was in a more advantageous location than Haller City (Figure 4) (City of Arlington 2021).

Following World War I, the City of Arlington continued to thrive in the agricultural, dairy farming, and shingle milling industries. During the Great Depression, many people found themselves unemployed, and in 1933 the Civilian Conservation Corps opened a camp near Darrington to employ men for civil work. An airstrip was constructed in Arlington in 1934 and was leased to the US Navy as a reinforcement to the training facilities in Seattle. Two US Navy Squadrons were stationed at the airstrip during WWII, and after the war ended the airfield fell back into civilian management (Oakley 2007).

After World War II, the City of Arlington's economy relied on logging and agriculture. By the 1980s, Arlington experienced a population boom as people moved into the area for affordable housing while working in Everett and Marysville (Oakley 2007). In 1999, the community of Smokey Point, south of Arlington, was annexed into the city (City of Arlington 2021). Today, the City of Arlington continues to grow as a commercial and residential center.

Figure 4. Business district of downtown Arlington after the town merger (Museum of History and Industry ca. 1907).

3.3.1 Indigenous People in the Present-Day

In 1974 the Stillaguamish Tribe of Indians petitioned the federal government for federal recognition as a Tribe. As Esther Ross put it in 1975, the Tribe would dwindle without recognition until it no longer exists, saying, "The Stillaguamish Tribe is unable to wait any longer" (The Spokesman-Review 1975). On October 27, 1976, the Stillaguamish Tribe of Indians gained federal recognition. In 2014 the Tribe was finally granted 64 acres of land for a reservation in Arlington, near the Tribal headquarters (Stillaguamish Tribe of Indians 2020b).

Tulalip Tribes underwent organization under the Indian Reorganization Act of 1934, and had a Constitution and Bylaws approved in 1936. There is now a seven member Tulalip Board of Directors that acts as the governing body. The Tribe is currently made up of 4,900 members, and provides services such as early learning academy, high education assistance, health and dental care, and a senior retirement home (Tulalip Tribes 2016).

3.3.2 History of the Project Area

The Project Area is located within Section 14 of Township 31 North and Range 5 East and was first mapped by the U.S. General Land Office in 1875. At that time, there were some wetlands mapped to the north of the Project Area near the Stillaguamish River, and Ba Quab or Kent's Prairie was mapped as a "grassy prairie" just over a half a mile to the west of the Project Area (Figure 5) (U.S. Surveyor General 1875). Kent's Prairie is an important place to the people of the Stillaguamish Tribe of Indians. The vegetation noted in 1875 time consisted of heavy fir, hemlock, cedar, vine maple, devils club, and huckleberry (U.S. Surveyor General 1875). The first land patent issued that includes the Project Area was to Lewis Clark in 1890 (U.S. Bureau of Land Management 1890).

In 1910, the Project Area fell within a parcel claimed by M. C. Tager. The railroad and roads were mapped in their present-day alignments. The Arlington cemetery was also evident in the map at its present-day location west of a road in the present-day alignment of 67th Avenue Northeast (Figure 6) (Anderson Map Company 1910; USGS 1911). In 1927, the parcel that overlaps with the Project Area was claimed by O. Robb, and the railroad was labelled "N.P. RWY" for the Northern Pacific Railway (Metsker Map Company 1927). In 1943, the parcel that of the Project Area was parceled in its present-day footprint. The parcel was claimed by L. Allen (Kroll Map Company 1943). In 1950 aerial imagery showed two structures and the driveway loop within the central, northern part of the Project Area (NetrOnline 2023).

Two historic structures existed within the Project Area. According to the Snohomish County Assessor, one structure was a residence built in 1950, and the other structure was a garage (Figure 7) (Snohomish County Historic Property Information 2023). In 1960, the parcel was claimed by Lottie Allen (Kroll Map Company 1960). In 1975, the parcel was claimed by Ward Sharp (Metsker Map Company 1975). In the 1980s, the parcel was claimed by an L. Sharp (Metsker Map Company 198x). The structures were visible in aerial imagery until 2009. By 2011, the structures had been removed from the parcel (NetrOnline 2023).

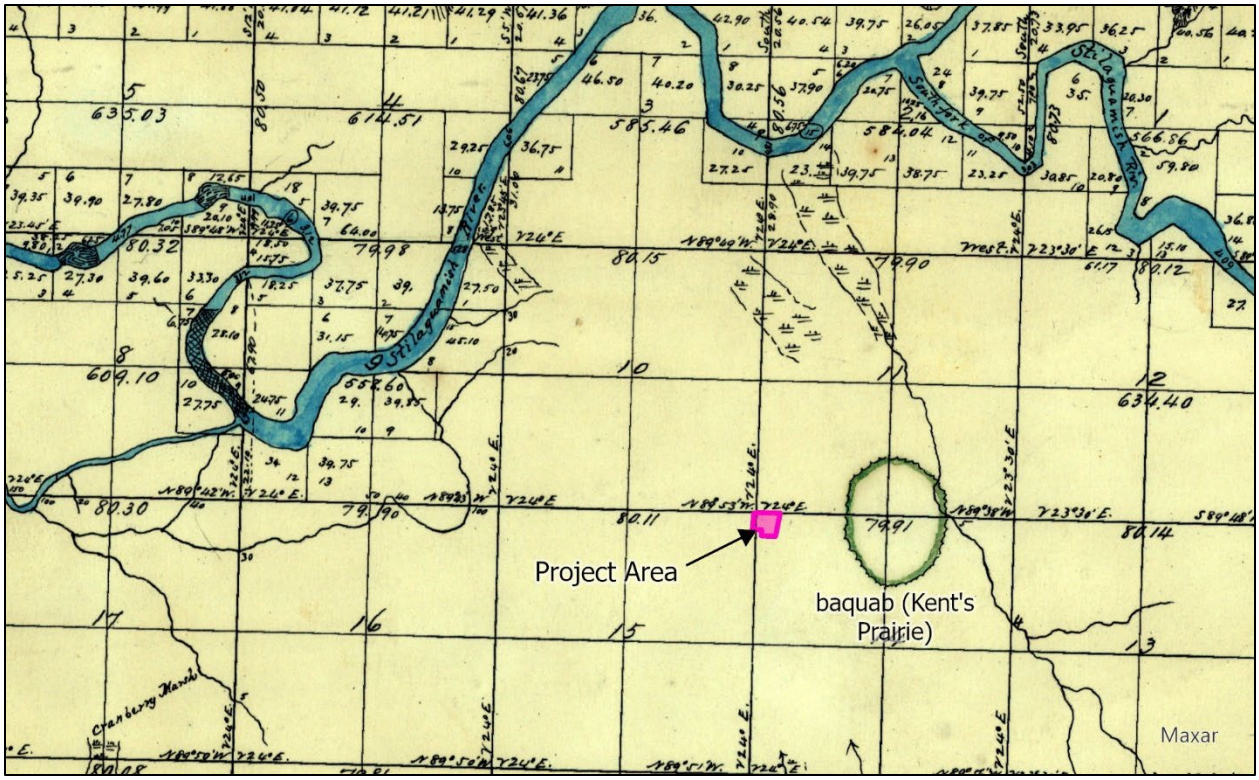

Figure 5. The Project Area on a section of the 1875 GLO Map (U.S. Surveyor General 1875).

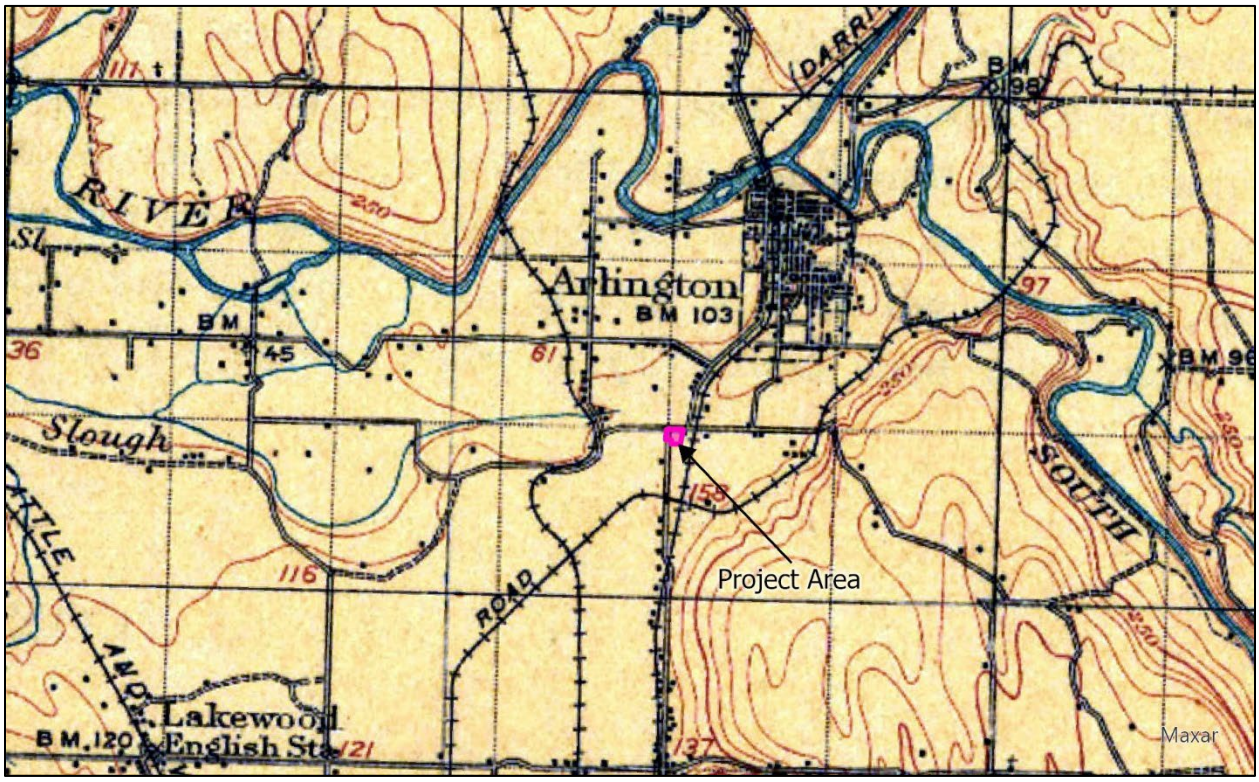

Figure 6. The Project Area on a section of the 1911 Mount Vernon, WA, USGS Map (USGS 1911).

Figure 7. Image of residential structure that was removed from the parcel previously (Snohomish County Historic Property Information 2023).

4.0 Archaeological Review

A review of the Department of Archaeology and Historic Preservation's (DAHP) database of recorded archaeological sites and previous archaeological work within a one-mile radius of the Project Area was conducted prior to field work. According to DAHP's Predictive Model, the Project Area is at a moderate to high risk for the presence of cultural resources.

4.1 Recorded Archaeological Sites

There were four recorded archaeological sites within a one-mile (mi) radius of the Project Area, which are detailed in Table 4 and below.

Table 4. Recorded archaeological sites within a one-mile radius of the Project Area.

Site Number	Site Type	Site Recorders	Distance from Project Area
45SN879	Precontact lithic material	Larsen 2023	0.45 mi north
45SN766	Precontact lithic material	Osiensky 2020	0.65 mi east
45SN486	Precontact lithic isolate	Carrilho 2009	1.0 mi east
45SN026	Precontact lithic material	Myrick and Kidd 1961; Obermayr 1991	1.0 mi south

45SN879: The 211th Place NE Lithic Site (45SN879) was a precontact lithic material site comprised of three flake artifacts. The site was identified along the ridgeline of a high river terrace above the Stillaguamish River floodplain, 0.45 mi north of the Project Area. The flakes were all made from fine-grained volcanic rock. The artifacts were identified in a yellowish-brown sandy loam at approximately 50 centimeters depth below surface (cm dbs). The artifacts were identified in area 103 meters (m) long and 25 m wide.

45SN766: The Jensen Lithic Scatter (45SN766) was a precontact lithic material site, comprised of lithic flakes, tools, debitage, and Fire modified rock (FMR), 0.65 mi east of the Project Area. The lithic artifacts included one partial flake with use-wear, one broken projectile point of white, translucent cryptocrystalline silicate, one bifacially flaked artifact, debitage flakes, and FMR. The artifacts were associated with the Olcott Phase based on material, size, bifacial edge, cortex, and patina. The site spanned an area that was 40 m long and 1 m wide. The artifacts were found between 35 and 60 cm dbs within B-Horizon soils (Osiensky 2020).

45SN486: Precontact lithic isolate site 45SN486 was a basalt thumbnail scraper located 1.0 mi east of the Project Area. It was found in the upper 20 cm of a shovel test. No other artifacts were identified in the area (Carrilho 2009).

45SN026: Precontact lithic material site 45SN026 was identified by Myrick and Smith (1961) 1.0 mi south of the Project Area. The site was located on a flat terrace, a few yards from a high ridge. Artifacts were identified scattered across several acres on the ground surface. The site's dimensions were 500 yards long and 100 yards wide. In 1961, the area was actively being used for agriculture. Identified artifacts included lithic choppers, scrapers, bifacially worked points, lithic fragments, and one serrated point. Obermayr (1991) revisited the site but did not identify any cultural material. Most of the site had been covered in fill, leveled, or was overgrown with grass.

4.2 Cultural Resource Surveys

There have been 14 cultural resources assessments within a one-mile radius of the Project Area. These surveys are detailed in Table 5 and below.

Table 5. Cultural resource assessments within a one-mile radius of the Project Area.

Reference	NADB	Report Title	Result
Chambers 2010a	1680166	*Archaeological Assessment for the 67th Avenue Phase III Improvement Project Arlington, Snohomish County, Washington*	negative
Ozbun 2005	1346406	*Cultural Resource Survey of Northwest Pipeline Corporation's Capacity Replacement Project, Western Washington Addendum Seven: Seattle, Lake Shore & Eastern Railway Spur at the Arlington 3 Pipeyard*	negative
Wilson *et al.* 2013	1685105	*Prairie Creek Drainage Improvements Project- Phase 2 Construction Cultural Resources Assessment, Arlington, Snohomish County, Washington*	negative
Iversen 2014a	1685732	*Archaeological Monitoring for the Prairie Creek Drainage Improvements Project- Phase 2 Construction, City of Arlington, Snohomish County, Washington (Permit Reference Number NWS-2013-01023)*	negative
Bush and Wilmoth 2020	1694059	*Archaeological Investigation Report: Pilchuck Village Project (Parcels 00769800000600 and 00793300002801), Arlington, Snohomish County, Washington*	negative
Gouette and Larsen 2023		*Cultural Resources Assessment of the City of Arlington 211th PL NE – 67th Ave NE to SR 530 (P-02.57) Project, Arlington, Snohomish County, Washington*	Positive for 45SN879
Iversen and Osiensky 2020a	1694469	*Cultural Resources Assessment for the Arlington Valley Road Land Sale Project, Arlington, Snohomish County, Washington*	negative
Iversen 2014b	1685034	*Addendum to the Archaeological Assessment for the 67th Avenue Phase III Improvement Project, Arlington, Snohomish County, Washington*	negative
Baldwin et al. 2023	1697591	*A Cultural Resources Assessment of the Amber Grove Development (TPN 31051400101800), Arlington, Snohomish County, Washington*	negative
Larsen *et al.* 2016	1691924	*Archaeological Survey and Evaluation of the Proposed Park 77 Development, Arlington, Snohomish County, Washington*	negative
Iversen and Osiensky 2020b	1694591	*Archaeological Assessment for the Lux Project, Arlington, Snohomish County, Washington*	positive for 45SN766
Piper and Smith 2009	1353374	*Phase 2 Cultural Resources Assessment for the Sedro Wooley- Horse Ranch Transition Line Upgrade, Skagit County and Snohomish County, Washington*	positive for 45SN486
Schumacher and Hartmann 2009	1353592	*Cultural Resources Survey for Mid-Mountain Materials Cell Tower (SE07101A), Arlington, Washington*	negative
Stipe 2011	1680440	*Arlington Food Bank Cultural Resource Survey*	negative

Drayton Archaeological Research (Chambers 2010a) performed a cultural resources assessment along 67th Avenue, 80 feet (ft) north of the Project Area. The cultural resources assessment included a pedestrian survey of the area and the inspection of soil piles throughout the project. No artifacts were identified during the inspection of the soil piles. During the pedestrian survey,

eight historic properties were identified, including a segment of the historic SLS&S Railway. Historic Property Inventories (HPIs) were created for the properties that were previously unidentified. It was recommended that the project proceed without archaeological oversight.

Archaeological Investigations Northwest, Inc. (Ozbun 2005) performed a cultural resources assessment prior to pipeline improvements 80 ft east of the Project Area. The assessment included background research and a site visit. It was determined that the project would have no adverse effects on historic properties. No further archaeological oversight was recommended.

Environmental Science Associates (Wilson *et al.* 2013) performed a cultural resources assessment along Prairie Creek 90 ft northeast of the Project Area. The cultural resources assessment included background research, pedestrian survey, and subsurface testing. Five shovel tests were dug, all of which disturbed by previous construction activities. No cultural resources were identified. It was recommended that the project proceed with an archaeological monitor onsite during all ground disturbing work.

ASM Affiliates (Iversen 2014a) performed archaeological monitoring tasks during the ground disturbing work 275 ft east of the Project Area. The work included the replacement of a culvert, Prairie Creek channel realignments, and sediment removal from the channel. No cultural resources were identified during this work.

Equinox Research and Consulting International, Inc (Bush and Wilmoth 2020) performed a cultural resources assessment on four acres 900 ft east of the Project Area. The area was inspected via a pedestrian survey and the digging of 20 shovel tests. Identified sediments included imported and local fill over glacial outwash. No cultural resources were identified, and no further archaeological oversight was recommended.

Legacy Anthropology, LLC (Gouette and Larsen 2023) surveyed along a 2,200-foot-long segment of 211th Place Northeast, 0.45 mi north of the Project Area. Forty-one shovel tests were dug, three of which were positive for cultural resources. Three lithic flakes were identified and recorded as 45SN879. It was recommended that a monitoring permit be obtained before proceeding with the project.

ASM Affiliates (Iversen and Osiensky 2020a) conducted a cultural resources assessment of 12.54 acres 0.45 mi southeast of the Project Area. Thirty shovel tests were dug at an interval of 20-30 meters. All the shovel tests were negative for cultural material. No further archaeological oversight was recommended for the project.

ASM Affiliates (Iversen 2014b) performed archaeological documentation of a buried railroad spur along 67th Avenue, 0.5 mi north of the Project Area. The buried spur was associated with the SLS&S Railway but was not considered a contributing element to the National Register of Historic Places. The identified section of buried railroad was 110 ft long and 5 ft wide. No further archaeological oversight was recommended.

Drayton Archaeology (Baldwin *et al.* 2023) performed a cultural resources assessment of 14-acres of land 0.5 mi southeast of the Project Area, prior to residential development. Twenty-nine shovel tests were dug, all of which were negative for cultural material. No further archaeological oversight was recommended.

Caldera Archaeology (Larsen *et al.* 2016) investigated seven adjoining parcels 0.5 mi east of the Project Area. The project included the construction of 17 multi-family apartment buildings on

eight acres. Thirty shovel tests were dug throughout the project area, all of which were negative for cultural material. No further archaeological oversight was recommended.

ASM Affiliates (Iversen and Osiensky 2020b) conducted a cultural resources assessment prior to the construction of an apartment complex 0.55 mi northeast of the Project Area. Thirty-nine shovel tests were dug within the 3.2-acre project area. Of these, eight were positive for precontact lithic material, including FMR, lithic flakes, and lithic tools. The site was designated the Jensen Lithic Scatter (45SN766). One artifact, a bifacially flaked cobble, was interpreted to be from the Olcott Phase. All artifacts were identified in a disturbed context. It was recommended that a DAHP Archaeological Monitoring Permit be obtained and followed prior to ground disturbing work for the project.

Northwest Archaeological Associates, Inc. (Piper and Smith 2009) conducted a cultural resources assessment prior to power pole and access road upgrades along a 39-mile stretch, including a section 0.9 mi southeast of the Project Area The project spanned 579.2 acres, and ten archaeological sites were identified throughout the project. Precontact lithic isolate side 45SN486 was identified 1.0 mi east of the Project Area. This site was comprised of a basalt thumbnail scraper that was identified at the edge of the uplands south of Arlington within the top 20 cm of sediment. It was recommended that fill should be imported to the area to avoid nearby ground disturbance.

Cultural Resources Consultants, Inc. (Schumacher and Hartmann 2009) surveyed prior to the installation of a cell tower 0.93 mi south of the Project Area. Two shovel tests were dug, both of which were negative for cultural resources. No further archaeological oversight was recommended.

Tetra Tech (Stipe 2009) performed a cultural resources survey prior to the construction of a food bank 0.94 mi southwest of the Project Area. Twelve shovel tests were dug to 50 cm dbs. No cultural resources were identified, and no further archaeological oversight was recommended.

4.3 Historic Properties

There are 274 inventoried properties documented on the DAHP's Historic Property Inventory within a one-mile radius of the Project Area. One of these properties is on the National Register of Historic Places. The Naval Auxiliary Air Station, Arlington (45SN350) is located 0.92 mi southwest of the Project Area. This airport contains two historic buildings, two active runways, an abandoned runway, six hardstands, and a boresighting range. The complex was built during World War II and was used for naval flight training (Boswell and Heideman 2011).

4.4 Recorded Cemeteries

There is one recorded cemetery within one mile of the Project Area. The Arlington Municipal Cemetery is located approximately 60 ft west of the Project Area, directly across 67th Avenue Northeast. It was established in 1904 as the Harwood Cemetery and contains many of the graves of the early Arlington and Haller City residents. Over time, neighboring parcels were added to the cemetery; it now encompasses over 30 acres. The cemetery was run by a non-profit cemetery association until 1999 when the City of Arlington took over its maintenance. In 2018, the cemetery contained 7,803 burials. The cemetery is in active use (Historic Cemetery Preservation Capital Grant Program 2018).

4.5 Traditional Cultural Properties

There are no recorded Traditional Cultural Properties within one mile of the Project Area.

5.0 Methods

Prior to fieldwork, a thorough review of the geological and cultural history was conducted, as well as a review of previous archaeological projects and recorded archaeological sites. The Island County's assessor parcel map portal, SCOPI, was used to identify parcel information. Additionally, historic maps, including GLO, Metsker, Anderson, and Kroll maps, USGS Quadrangle Maps, as well as historic aerial imagery of the Project Area were inspected. A review of previous archaeological work was also conducted using the Department of Archaeology and Historic Preservation's (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD). Field methods are outlined below.

5.1 Objectives and Expectations

The Project Area lies within 0.43 miles of the previously recorded boundary of precontact lithic scatter site 45SN879. This suggests that there is a very high probability that protected, precontact cultural resources may exist within the Project Area. Additionally, the Project Area lies within a resource-rich area near sources of freshwater, on a gentle slope that may have been ideal for living on or food gathering in the past. The DAHP considers the Project Area to be at a very high risk for the presence of cultural resources and highly advises an archaeological survey. The goal of this survey is to sample the Project Area thoroughly enough to determine the likelihood that cultural resources will be encountered as a result of this project, by examining all above ground potential cultural resources and by hand excavating shovel tests to sample for buried cultural resources. The archaeological survey is a sampling method that does not negate the existence of cultural resources within a Project Area if the survey is negative.

5.2 Field Methods

The planned survey methods for this project included a thorough examination of all potential above-ground cultural resources, like trees, rock piles, and exposed sediments, and the excavation of shovel tests placed both systematically and judgmentally based on proximity to the Arlington Cemetery and within the footprint of the residential structures that used to exist within the Project Area.

5.2.1 Pedestrian Survey

The pedestrian survey consists of the above ground portion of the survey. It includes the examination of the trees on-site for evidence of cultural modification, like stripped bark and artificially bent branches. Rock piles are examined for signs of age, like moss and fungus growth, and weathering on the underside of rocks buried within the ground. Sediments exposed at the ground surface are also inspected for signs of cultural resources like shell, charcoal, or artifacts. Additionally, all existing historic above ground structures would be documented, but based on a pre-field Project Area review we know that there are no existing structures within the Project Area.

5.2.2 Subsurface Testing

Prior to work in the field shovel tests are planned to be laid out in both a systematic and judgmental strategy, based on the concerns of the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer (THPO) Kerry Lyste of the proximity of the Project Area to Arlington Cemetery. There was also once two a historic-aged residential structures on the parcel that has since been removed. Subsurface testing will also be concentrated where the structures once stood. Ground disturbing work is planned across the entire parcel, so the entire parcel will undergo both the pedestrian and subsurface part of the archaeological survey.

The targeted depth for each shovel test was 100 cm (40 in.), with a diameter of 50 centimeters (20 in.). Sometimes reaching 100 cm is not possible due to very dense compaction of sediments, or root or rock obstructions. If 100 cm can't be reached the goal is to at least reach 20 cm depth into an intact glacial deposit. All sediments excavated from each shovel test will be sieved through a quarter-inch mesh in a standing screen. Sediments and objects that do not pass through the screen will be carefully examined. When possible or necessary, a six-inch hand-driven bucket auger will be used at the base shovel tests.

Descriptions and depths of sediments and soils exposed in each shovel test and auger probe profile will be documented and photographed. Notes will be handwritten in Rite-in-the-Rain notebooks. Sediment and soil types will be interpreted using the United States Department of Agriculture Soil Texture Triangle, the Munsell Color System, and the literature outlined in the Environmental Setting section. The profile of each shovel test will be photographed. The location of each shovel test will be mapped by hand on a paper map and also by Global Positioning System (GPS) using a Bad Elf GNSS Surveyor receiver and antenna to a sub-meter accuracy. After documentation, each shovel test will be backfilled completely with material removed from it.

If cultural resources are identified during the course of the survey they will be described thoroughly in hand-written notes, measured by metric or imperial units, and will be photographed. The location will be mapped by hand and by GPS. Any Affected Tribes or interested parties who have asked to be updated about the project will be notified of the discovery. If cultural resources are identified in a shovel test four additional shovel tests will be placed radially around the positive test in a one-meter interval at the four cardinal directions. Additional radial shovel tests will be placed around each positive shovel test. No samples will be taken from any features, and any artifacts will be placed into a paper or plastic bag labelled with provenience information. All cultural resources will be reburied in the shovel tests. No cultural resources will be collected.

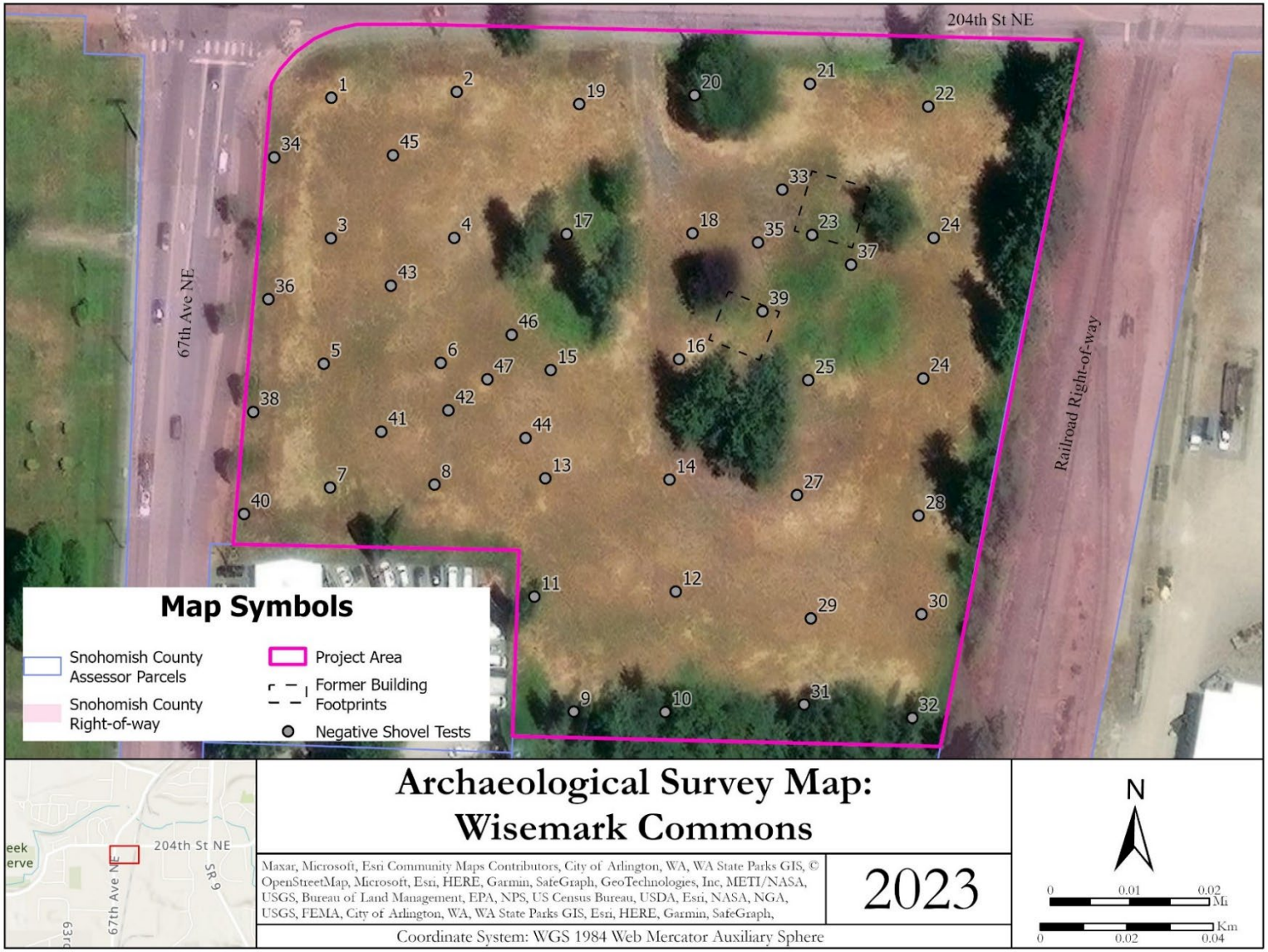

Figure 8. Map of shovel test placement within the Project Area.

6.0 Archaeological Survey Results

Total Subsurface Tests	47
Positive Subsurface Tests	0
Negative Subsurface Tests	47

The archaeological survey was conducted on November 20 and 21, 2023, at 6804 204th St NE (Parcel No. 31051400200600), within the limits of the City of Arlington, Snohomish County, Washington (Figure 8). The weather conditions on that day were cold, and clear and sunny. The survey was carried out by Susan C. Larsen, M.A., who meets the Secretary of the Interior's Qualifications for a Professional Archaeologist, and Nicholas Gouette, B.A., of Legacy Anthropology. On November 20 the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer (THPO) Kerry Lyste visited the Project Area during the survey.

6.1 Pedestrian Survey

The pedestrian survey portion of the survey consisted of an examination of the trees and surface exposed sediments for the presence of cultural resources. This was done by walking throughout the Project Area in five-meter interval transects in a north to south orientation, where possible. The Project Area was mostly cleared of vegetation, with some trees dotted within the northern and central parts of the Project Area. On-site vegetation consisted of Western hemlock (Tsuga heterophylla), Himalayan blackberries (Rubus armeniacus), and grasses (Figure 9 and Figure 10). The trees were examined for signs of cultural modification. There was a remnant gravel driveway loop that extended from the central part of the northern Project Area into the northern half of the Project Area (Figure 11). There was very little evidence of the structures that once stood within the Project Area. Where the residence once was, the ground surface was level and covered in moss (Figure 12). There was once partially buried pipe exposed at the ground surface to the south of where the residence was located. The exposed surface sediments were investigated for the presence of cultural resources, such as charcoal, faunal remains, and artifacts. No cultural resources were identified during the pedestrian survey part of the cultural resources survey.

6.2 Subsurface Survey

A total of 47 shovel tests were placed throughout the Project Area. Most of the shovel tests (ST 1-32), were placed systematically in a 25-meter interval. The additional STs, 33-47 were placed judgmentally based on proximity to the existing cemetery across the street, the location of the previously demolished residential structures, and the slight undulation in the ground surface within the lower western part of the Project Area. Shovel Tests 34, 36, 38-40, 43, and 45 were placed between the systematically planned intervals because this is the part of the Project Area nearest to the cemetery. The Stillaguamish Tribe of Indians THPO, Kerry Lyste, expressed concern about the potential for Indigenous burials outside of the boundary of Arlington Cemetery.

The subsurface profiles were relatively consistent throughout the Project Area. The shovel tests were hand excavated to depths ranging between 70 and 99 centimeters (cm) depth below the ground surface. The typical profile consisted of a dark brown moderately compact gravelly sandy loam with some rootlets, overlying a loose dark yellowish-brown gravelly sand to gravelly sandy clay, terminating in a grayish brown to dark grayish brown loose to moderately compact sand. The profile appears to be relatively intact with distinct A, B, and C horizons clearly identified (Figure 13).

Figure 9. Overview of western portion of Project Area; view to the south.

Figure 10. Overview of eastern portion of the Project Area; view to the south.

Figure 11. Overview of existing gravel driveway loop; view to the southeast.

Figure 12. Overview of area where residential structures once stood.

This typical profile was also identified within all the shovel tests intentionally concentrated within the western portion of the Project Area, nearest to Arlington Cemetery (Figure 14). Shovel Test 41 was terminated at a depth of 74 cm due to impassible rocks. There did not appear to be any kind of previous ground disturbance within the Project Area near the cemetery, and no evidence of burials was identified. A disturbed profile was identified within some of the shovel tests concentrated within the footprint of previously existing structures. In Shovel Test 23, a gravelly dark brown sandy loam was identified over a loose, gravelly gray sand, without the yellowish-brown B-horizon soil that was identified consistently throughout the rest of the Project Area. This disturbed profile was also identified in STs 33 and 37. A relatively intact sediment profile was identified within the shovel tests placed within the slight undulation within the lower western part of the Project Area. This profile was consistent with the typical profile identified throughout the rest of the Project Area.

The sediment profile identified within the Project Area is consistent with the Everett very gravelly sandy loam. This unit has O, A, B, and C horizons formed within in it, which we identified within the subsurface profile. The sediment was also very gravelly and cobbly, which is also consistent with this unit. The appearance of soil horizons indicates that the subsurface within this parcel has undergone little development or ground disturbance in the past. No cultural resources were identified during shovel testing within the Project Area. For shovel test descriptions see Appendix 2.

Figure 13. Profile of Shovel Test 12.

Figure 14. Profile of Shovel Test 40.


Figure 15. Profile of Shovel Test 33.

7.0 Conclusions and Recommendations

On November 6, 2023, Legacy Anthropology was contacted by Michael Weinstein of Synthesis Interests, requesting an archaeological survey at 6804 204th Street Northeast (Parcel ID 31051400200600), within the limits of the City of Arlington, Snohomish County, Washington. There are plans to construct a mixed-use 150-unit community. This project lies within 85 feet of the Arlington Cemetery, and 1,200 feet from Kent's Prairie. The lead agency for this project is the City of Arlington.

Planned Development within the Project Area includes a mixed-use 150-unit development. The development includes multi-family residential structures, a club house, a restaurant, parking lots, underground utilities, and a commercial building.

On November 20 and 21, 2023, Legacy Anthropology, LLC conducted an archaeological assessment, including pedestrian survey and subsurface testing, throughout the entire Project Area. The survey was conducted by Susan C. Larsen, M.A., who meets the Secretary of the Interior's Standards for a Professional Archaeologist, Nicholas E. Gouette, B.A., of Legacy Anthropology. On November 20 the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer Kerry Lyste paid a site visit and examined one of the shovel tests. A total of 47 shovel tests were placed throughout the Project Area.

The sediment profile identified within the Project Area is consistent with the Everett very gravelly sandy loam. This unit has O, A, B, and C horizons formed within in it, which we identified within the subsurface profile. The sediment was also very gravelly and cobbly, which is also consistent with this unit. The appearance of soil horizons indicates that the subsurface within this parcel has undergone little development or ground disturbance in the past.

No protected cultural resources were identified during the archaeological survey of the Project Area. Based on the negative result and our consultation with the Stillaguamish Tribe of Indians Tribal Historic Preservation Officer we recommend the following:

- **That this project proceed without further archaeological oversight**
- **That ground-disturbing work be conducted under the guidance of an Inadvertent Discovery Plan (Appendix 1), which should remain on site and be followed of the duration of this project.**
- **That the Affected Tribes continue to be consulted with at every step of this project**

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9.0 Appendices

9.1 Appendix 1: Inadvertent Discovery Plan (IDP)

Location: 6804 204th Street Northeast, Arlington, Washington
Lead Agency: City of Arlington
County: Snohomish

The Inadvertent Discovery Protocol (IDP) outlines the plan to be followed in the event that archaeological resources or human remains are identified during above or below ground construction activities. The IDP is not a replacement for any formal cultural resources review required by the Executive Order 21-02 or Section 106. The IDP should remain on-site for the duration of above and below ground disturbing construction activities and should be followed if cultural resources are believed to be identified at any stage of the project.

If, during the course of construction, earth movement, clearing, or other site disturbance, human remains, or archaeological resources are encountered the following steps must be taken:

Step 1: Stop Work

- All work within a 50-foot radius shall cease immediately.
- The discovery must remain untouched.

Step 2: Protect the Discovery

- All equipment must be moved at least 50 feet away to create a clear, wide, and identifiable boundary.
- A temporary barrier of fencing, stakes, flagging tape, or other available materials must be installed around the perimeter of the discovery to protect it.
- Do not allow vehicles, equipment, or unauthorized persons to enter the discovery site.
- Do not resume work within a 50-foot radius of the discovery site.

Step 3: Notify: the **on-site supervisor** is responsible for notifying:

- The Project Lead:
- A Professional Archaeologist: Susan Larsen (360-471-0954)

Step 4: Notify: The **Project Lead** will notify the Affected Tribes and DAHP:

- DAHP Local Government Archaeologist: Stephanie Jolivette (360-628-2755)
- Muckleshoot Indian Tribe Archaeologist: (253-876-3272)
- Snoqualmie Tribe Archaeology and Historic Preservation Director: Steven Moses (425-495-6097)
- Swinomish Indian Tribal Community THPO: Josephine Jefferson (360-466-7352)
- Stillaguamish Tribe of Indians THPO: Kerry Lyste (360-652-7362 ext. 226)
- Suquamish Tribe THPO: Dennis Lewarch (360-394-8529)
- Sauk-Suiattle THPO: Kevin Joseph (360-436-0333)
- Tulalip Tribes Cultural Resources: Richard Young (425-239-0182)

Additional contacts in the event that human remains are identified:

- DAHP Contacts: Dr. Guy Tasa (360-790-1633) or Dr. Jackie Berger (360-890-2633)

- Snohomish County Medical Examiner (425-438-6200)
- City of Arlington Police Department (360-403-3400 or 911)

If any human skeletal remains are identified, they will be treated at all times with dignity and respect, in accordance with RCW 68.50.645 and the Native American Graves and Protection and Repatriation Act. **The remains will not be disturbed or photographed, or any information about them shared to social media.** The remains are to be covered carefully with a tarp or fabric for protection.

The Affected Tribes shall determine whether the discovery site contains archaeological resources that should be preserved. They will designate the appropriate area within the site as a preservation area. No ground disturbance is permitted within a preservation area.

The preservation area designation shall remain in the appropriate area within a site until:

- The human remains or archaeological resources have been completely removed from the site; or
- An agreement has been reached, in consultation with the Affected Tribes, that provides for the preservation of the human remains or archaeological resources.

Any precontact or historic archaeological site will be documented by a Professional Archaeologist. This may include data recovery, screening of sediments, recording of subsurface stratum, and cataloging of artifacts.

The Inadvertent Discovery Protocol must be implemented in the event that precontact or historic cultural resources are identified. These can include:

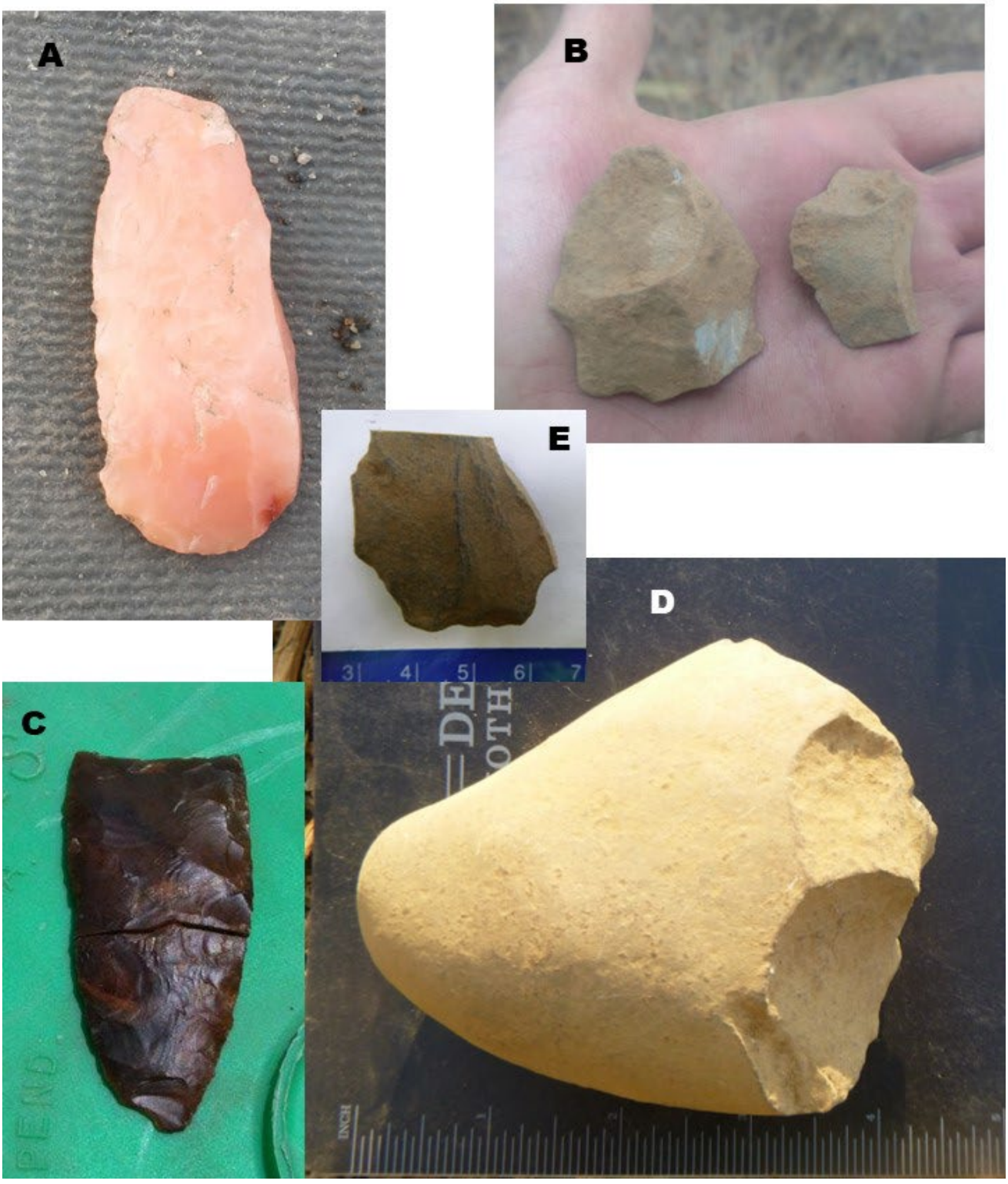
- Flaked stone artifacts (e.g., flakes, projectile points, uni- or bifacially flaked cobbles)
- Groundstone artifacts (e.g., net wights, mauls, adze blades)
- Bone or shell artifacts (e.g., awls, bone or antler wedges, dentalium beads)
- Culturally modified trees (e.g., trees with bark stripped)
- Carved or woven wooden artifacts (e.g., basketry, rope, carved wood)
- An accumulation of shell, charcoal, burnt rocks, stained soil (e.g., intact or disturbed shell midden)
- Clusters of whole or cracked rocks, with or without charcoal, which appear out of place (e.g., hearth or cooking feature)
- Historic artifacts older than 50 years (e.g., agriculture or logging equipment, bottles and jars, ceramics, cans, or other domestic items
- Historic foundations or buried structures (e.g., concrete foundations, remnant brick chimneys
- Historic railroad properties (e.g., railroad grades, trolley tracks)
- Evidence of human remains (e.g., headstones, bones)

See below for photographic examples of archaeological and cultural resources.

Examples of Cultural Resources

Examples of flaked stone artifacts

A) flaked lithic artifact
B) lithic flakes
C) bifaciallly flaked chert projectile point
D) bifacially flaked cobble
E) lithic flake



Examples of ground stone artifacts

A) ground adze blade

B) grooved ground stone artifact
C) ground stone object

Examples of bone artifacts

A) ground bone artifact

B) Whale vertebra, appears unaltered, but indicative of an archaeological site if separated from the rest of the skeleton

Examples of shell midden

A) shell midden eroding from profile wall

B) shell midden exposed during trench excavation

C) stratified shell midden exposed in bank

D) close-up of shell midden with charcoal and fire-modified rock visible

Examples of Historic Objects and Artifacts

A) Glass bottle base with an Owens-Illinois Glass Company maker's mark, dated to 1940
B) 1930s era leather shoe soles
C) Husky Brand Beverage drink bottle
D) John Deere Side Delivery Rake
E) Fragments from multiple ceramic vessels

Historic features

A) Historic Fortson Mill, in ruin

B) Historic levee

Evidence of human remains

A) Headstone in manicured cemetery, marking a human burial

Headstones like this one are indicative of a historic burial. Many burials will not be marked this way.

B) Historic burial in cemetery where the entire grave is marked

C) Non-human mammal bones, an example of what bones look like after they have been buried for a period of time

9.2 Appendix 2: Results of Subsurface Testing

ST No.	Date		Recorder	cm Depth Range	Munsell Color	Sediment Texture	Gravel Content	Compaction	Contents	Terminated?	Basal Transition	Terminated at:	Groundwater
1		20-Nov-23	SCL	0-22	10YR 3/3 dark brown	sandy loam	15-30%	loose	none	no	clear	target depth	no
				22-41	10YR 3/4 dark yellowish brown	sandy loam	15-30%	loose	none	no	clear		
				41-84	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
2		20-Nov-23	NG	0-18	10YR 3/3 dark brown	sandy loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
				18-31	10YR 4/4 dark yellowish brown	sand	15-30%	moderate	none	no	abrupt		
				31-52	10YR 5/4 yellowish brown	sand	30-45%	moderate	none	no	gradual		
				52-94	10YR 5/2 grayish brown	sandy loam	30-45%	moderate	none	yes			
3		20-Nov-23	SCL	0-25	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	target depth	no
				25-40	10YR 3/4 dark yellowish brown	sand	15-30%	loose	none	no	gradual		
				40-79	10YR 4/2 dark grayish brown	sand	15-30%	loose	none	yes			
4		20-Nov-23	NG	0-22	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
				22-34	10YR 3/4 dark yellowish brown	sandy clay	15-30%	moderate	none	no	abrupt		
				34-74	10YR 5/4 yellowish brown	sand	30-45%	moderate	none	no	gradual		
				74-87	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
5		20-Nov-23	SCL	0-31	10YR 3/3 dark brown	sandy loam	15-30%	moderate	charcoal flecks	no	clear	target depth	no
				31-45	10YR 3/4 dark yellowish brown	sand	15-30%	loose	none	no	gradual		
				45-82	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
6		20-Nov-23	NG	0-25	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
				25-32	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		

ST No.	Date	Recorder	cm Depth Range	Munsell Color	Sediment Texture	Gravel Content	Compaction	Contents	Terminated?	Basal Transition	Terminated at:	Groundwater
			32-52	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	clear		
			52-80	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
7	20-Nov-23	SCL	0-35	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	target depth	no
			35-75	10YR 4/2 dark grayish brown	sandy loam	15-30%	loose	none	yes			
8	20-Nov-23	NG	0-20	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			20-34	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			34-51	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	clear		
			51-80	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
9	20-Nov-23	SCL	0-29	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout, tree roots	no	clear	target depth	no
			29-71	10YR 4/2 dark grayish brown	sandy loam	30-45%	loose	none	yes			
10	20-Nov-23	NG	0-38	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout, tree roots, charcoal flecks	no	abrupt	target depth	no
			34-46	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			46-71	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			71-88	10YR 5/1 gray	sand	0-15%	moderate	none	yes			
11	20-Nov-23	SCL	0-32	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	target depth	no
			32-74	10YR 4/2 dark grayish brown	sandy loam	30-45%	loose	none	yes			

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12	20-Nov-23	NG	0-31	10YR 3/3 dark brown	sandy loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			31-70	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
13	20-Nov-23	SCL	0-27	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	impassable rocks	no
			27-69	10YR 3/4 dark yellowish brown	sand	30-45%	loose	none	yes			
14	20-Nov-23	NG	0-23	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			23-28	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			28-64	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			64-78	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
15	20-Nov-23	SCL	0-21	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	target depth	no
			21-34	10YR 3/4 dark yellowish brown	sandy loam	30-45%	loose	none	no	gradual		
			34-70	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
16	20-Nov-23	NG	48-69	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual	target depth	no
			68-84	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
17	20-Nov-23	SCL	0-31	10YR 3/3 dark brown	sandy loam	30-45%	moderate	rootlets throughout, tree roots	no	clear	target depth	no
			31-77	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			

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18	20-Nov-23	NG	0-21	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout, tree roots	no	gradual	target depth	no
			21-34	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate		no	clear		
			34-59	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			59-75	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
19	20-Nov-23	SCL	0-21	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	clear	impassable rocks	no
			21-70	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
20	20-Nov-23	NG	0-87	10YR 4/2 dark grayish brown	sandy loam	15-30%	moderate	rootlets throughout, modern refuse, tree roots, charcoal flecks	no	abrupt	target depth	no
			87-99	10YR 5/4 yellowish brown	sandy loam	30-45%	dense	none	yes			
21	20-Nov-23	SCL	0-25	10YR 3/3 dark brown	sandy loam	30-45%	moderate	rootlets throughout	no	clear	target depth	no
			25-53	10YR 3/4 dark yellowish brown	sand	30-45%	loose	none	no	clear		
			53-82	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
22	20-Nov-23	NG	0-21	10YR 2/2 very dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			21-45	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	charcoal flecks	no	gradual		
			45-69	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			69-94	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			

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23		20-Nov-23	SCL	0-32	10YR 3/3 dark brown	sandy loam	30-45%	moderate	rootlets throughout	no	gradual, clear	target depth	no
				32-79	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
24		20-Nov-23	NG	0-25	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
				25-40	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	modern refuse	no	gradual		
				40-61	10YR 5/4 yellowish brown	sand	30-45%	moderate	none	no	gradual		
				61-83	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
25		20-Nov-23	SCL	0-27	10YR 3/3 dark brown	sandy loam	30-45%	moderate	rootlets throughout	no	clear	target depth	no
				27-72	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
26		20-Nov-23	NG	0-7	10YR 3/2 very dark grayish brown	sandy loam	30-45%	dense	rootlets throughout	no	abrupt		
				7-19 cm	10YR 4/2 dark grayish brown	sandy loam	60-75%	very dense	none	no	abrupt		
				19-38	10YR 3/3 dark brown	sandy loam	0-15%	moderate	none	no	abrupt		
				38-45	10YR 4/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
27		20-Nov-23	SCL	0-23	10YR 3/3 dark brown	sandy loam	30-45%	moderate	none	no	clear	target depth	no
				23-83	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
28		20-Nov-23	NG	0-31	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
				31-46	10YR 4/4 dark yellowish brown	sandy loam	15-30%	moderate	modern refuse	no	abrupt		
				46-76	10YR 5/2 grayish brown	sand	30-45%	moderate	none	yes			
29		20-Nov-23	SCL	0-29	10YR 3/3 dark brown	sandy loam	30-45%	loose	none	no	clear	target depth	no
				29-81	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			

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30	20-Nov-23	NG	0-31	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			31-50	10YR 3/4 dark yellowish brown	sandy loam	30-45%	moderate	none	no	abrupt		
			50-77	10YR 5/2 grayish brown	sand	0-15%	moderate	none	yes			
31	20-Nov-23	SCL	0-30	10YR 3/3 dark brown	sandy loam	30-45%	moderate	rootlets throughout, tree roots	no	clear	target depth	no
			30-71	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
32	27-Nov-23	NG	0-38	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			38-46	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no			
			46-71	10YR 5/4 yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			71-84	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
33	21-Nov-23	SCL	0-25	10YR 3/3 dark brown	sand	30-45%	moderate	none	no	abrupt	target depth	no
			25-84	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
34	21-Nov-23	NG	0-15	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			15-28	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	charcoal flecks	no	clear		
			28-63	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			63-90	10YR 5/2 grayish brown	sand	0-15%	moderate	none	yes			
35	21-Nov-23	SCL	0-7	10YR 3/3 dark brown	sandy loam	15-30%	loose	none	no	abrupt	target depth	no
			7-33 cm	10YR 3/4 dark yellowish brown	sand	30-45%	loose	none	no	clear		
			33-78	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			

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36	21-Nov-23	NG	0-40	10YR 4/2 dark grayish brown	sandy loam	0-15%	moderate	rootlets throughout, charcoal flecks	no	abrupt	target depth	no
			40-68	10YR 3/4 dark yellowish brown	sandy clay	15-30%	moderate	charcoal flecks	no	abrupt		
			68-96	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
37	21-Nov-23	SCL	0-28	10YR 3/3 dark brown	sandy loam	15-30%	moderate	rootlets throughout	no	abrupt	target depth	no
			28-93	10YR 4/2 dark grayish brown	sand	15-30%	loose	none	yes			
38	21-Nov-23	NG	0-17	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			17-33	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	clear		
			33-88	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
39	21-Nov-23	SCL	0-22	10YR 3/3 dark brown	sandy loam	15-30%	moderate	none	no	abrupt	target depth	no
			22-49	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			49-76	10YR 4/2 dark grayish brown	sand	15-30%	loose	none	yes			
40	21-Nov-23	NG	0-25	10YR 3/3 dark brown	silt loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			25-36	10YR 3/4 dark yellowish brown	sandy clay	0-15%	moderate	none	no	gradual		
			36-68	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			68-94	10YR 5/2 grayish brown	sand	0-15%	moderate	none	yes			
41	21-Nov-23	SCL	0-27	10YR 3/3 dark brown	sandy loam	15-30%	moderate	none	no	clear	impassable rocks	no
			27-41	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	clear		

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			41-74	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
42	21-Nov-23	NG	0-24	10YR 3/3 dark brown	silt loam	0-15%	moderate	none	no	abrupt	target depth	no
			24-43	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	clear		
			43-60	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			60-83	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
43	21-Nov-23	SCL	0-28	10YR 3/3 dark brown	sandy loam	15-30%	moderate	none	no	clear	target depth	no
			28-47	10YR 3/4 dark yellowish brown	sand	30-45%	loose	none	no	clear		
			47-75	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
44	21-Nov-23	NG	0-21	10YR 3/3 dark brown	sandy loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			21-40	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	charcoal flecks	no	gradual		
			40-66	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			66-77	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
45	21-Nov-23	SCL	0-12	10YR 3/3 dark brown	sandy loam	15-30%	moderate	none	no	clear	target depth	no
			12-43 cm	10YR 3/4 dark yellowish brown	sandy loam	30-45%	loose	none	no	clear		
			43-71	10YR 4/2 dark grayish brown	sand	30-45%	loose	none	yes			
46	21-Nov-23	NG	0-24	10YR 3/3 dark brown		0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			24-39	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	none	no	gradual		
			39-50	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			50-63	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			
47	21-Nov-23	NG	0-23	10YR 3/3 dark brown	sandy loam	0-15%	moderate	rootlets throughout	no	abrupt	target depth	no
			23-35	10YR 3/4 dark yellowish brown	sandy loam	15-30%	moderate	charcoal flecks	no	gradual		

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			35-57	10YR 5/4 yellowish brown	sand	15-30%	moderate	none	no	gradual		
			57-79	10YR 5/2 grayish brown	sand	15-30%	moderate	none	yes			