

CULTURAL RESOURCES REPORT COVER SHEET

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Title of Report: Archaeological Investigation Report: Maddox Creek Fish Passage Barrier Removal Project, Mount Vernon, Skagit County, Washington

Date of Report: November 10, 2020

County: Skagit Township: 34N Range: 4E Sections: 29

Quad: Mount Vernon Acres: ~1.71 acres
PDF of report submitted (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 #:
None

ARCHAEOLOGICAL INVESTIGATION REPORT: MADDOX CREEK FISH PASSAGE BARRIER REMOVAL PROJECT, MOUNT VERNON, SKAGIT COUNTY, WASHINGTON

Prepared for: Skagit County Public Works under contract to Natural Systems Design



November 10, 2020

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Equinox Research and Consulting International Inc. (ERCI) would like to thank Natural Systems Design and Skagit County Public Works for retaining us for this investigation and for their commitment to the process and archaeological resources.

We extend our thanks to the representatives of the Samish Nation, Swinomish Indian Tribal Community and Upper Skagit Tribe for their insights and timely attention to our projects.

The opinions and recommendations in this report are those of ERCI alone and do not necessarily reflect those held by any of the organizations or individuals mentioned above. Any errors or omissions are ERCI's responsibility.

MANAGEMENT SUMMARY

Project	20-735 NSD _ SCPW Maddox Creek
County	Skagit
TRS	Township 34 N, Range 4 E, Section 29
Quad	MOUNT VERNON
Parcel ID	P28758
Address	None
Property Owner	City of Mount Vernon
Area	~1.71 acres
Lat/Long	48°24'2"N/122°19'7.6"W
UTM Zone	Zone 10 550434 Easting 5361178 Northing
Elevation	~110'-120'
Nearest Water Body	Skagit River
Nearest Arch Site	SK00521 – ~0.25 mile
Soils	Bow gravelly loam, Hoogdal silt loam
Geology	Everson Glaciomarine Drift, Fraser-age and Holocene alluvium sand

In December 2019, Torrey Luiting of Natural Systems Design contacted Kelly Bush of Equinox Research and Consulting International, Inc. (ERCI) for the Maddox Creek Fish Passage Barrier Removal Project (the Project) for Skagit County Public Works. The Project is funded by the State of Washington Department of Ecology, project number WQC-2019-SkCOPW-00102.

On July 30 to August 28, 2020 ERCI monitored excavation of fill material above the culvert. ERCI identified two fill events: a silty sand sediment over a clay sediment with rounded. Both fill events contained refuse. Several concrete pipes and concrete pipe fragments were exposed from the upturned roots in the silty sand fill.

Some refuse within the clay fill included a large, rusted horseshoe (Figure 32) and two identical bricks with four circles on one side, 22 cm by 10 cm by 6 cm (Figure 33-Figure 35). None of the objects were in intact sediments all had been brought in with the fill. All of the objects were recorded and then discarded.

This report documents ERCI's archival background research and results from archaeological monitoring of the Project. **No intact features or disturbed precontact objects were encountered.**

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1.0 INTRODUCTION

In December 2019, Torrey Luiting of Natural Systems Design contacted Kelly Bush of Equinox Research and Consulting International, Inc. (ERCI) for the Maddox Creek Fish Passage Barrier Removal Project (the Project) for Skagit County Public Works. The Project is funded by the State of Washington Department of Ecology, project number WQC-2019-SkCOPW-00102.

The Project includes

- the excavation and removal of fill and a 233-foot long culvert
- the construction of a new stream channel
- the construction of a drainage swale

This report documents ERCI's archival background research and monitoring of construction monitoring activities for the Project.



Figure 1: Regional map showing approximate location of APE.

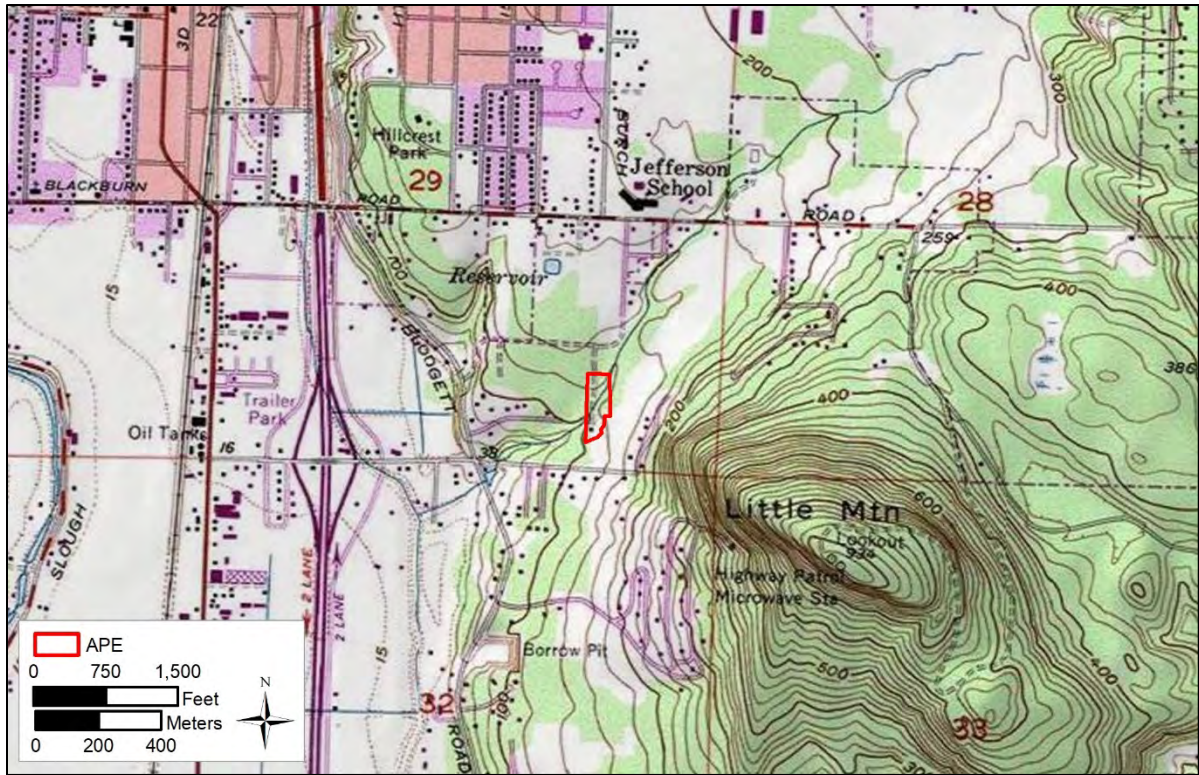


Figure 2: USGS Mount Vernon 7.5-minute quadrangle showing the APE outlined in red.

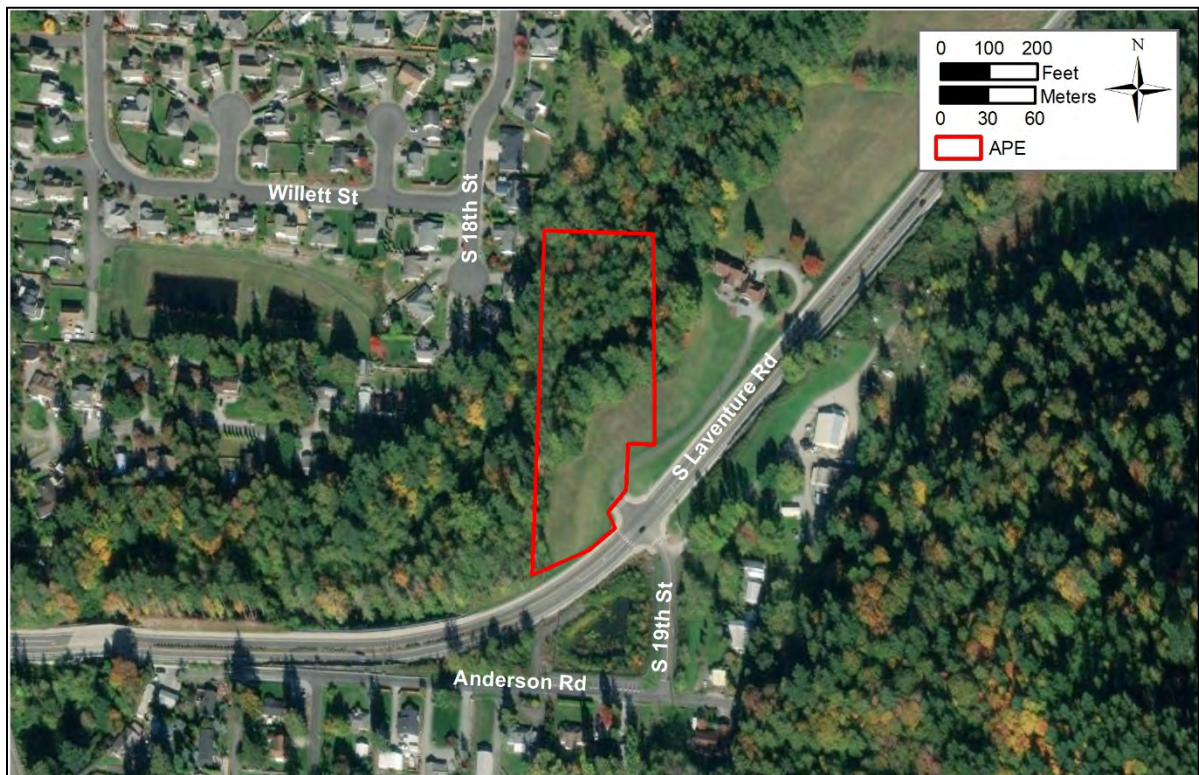


Figure 3: Aerial showing APE outlined in red.

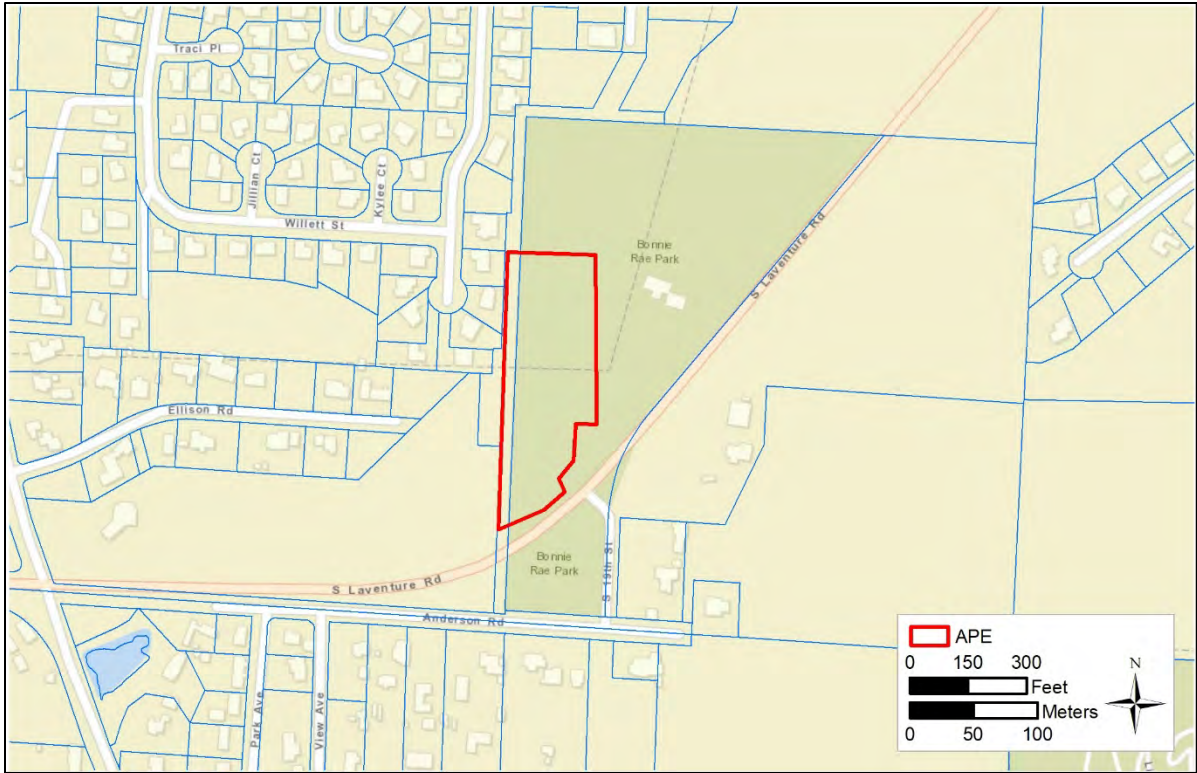


Figure 4: Skagit County Assessor's Map showing APE outlined in red.

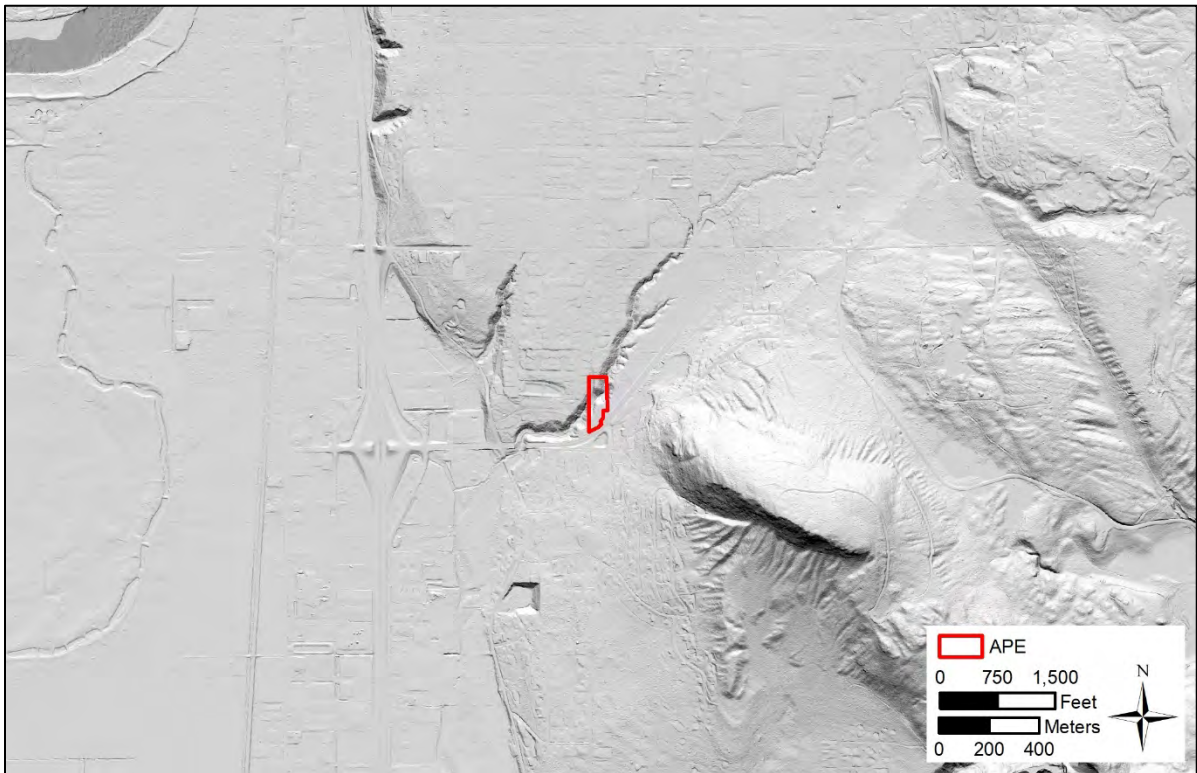


Figure 5: LIDAR map showing APE outlined in red.

2.0 REGULATORY FRAMEWORK

The Project has received funding by the State of Washington Department of Ecology, project number WQC-2019-SkCOPW-00102. Due to state funding, the Project must comply with Executive Order 05-05.

State of Washington Executive Order 05-05—Archaeological and Cultural Resources stipulates that all state agencies take reasonable steps to avoid, minimize or mitigate adverse effects to the archaeological or cultural resource. Signed in November of 2005 and recognizes the rich and diverse cultural heritage of Washington State. This order requires that state agencies consult with the Department of Archaeology and Historic Preservation (DAHP) and affected Tribes into the planning process for any capital construction projects or land acquisition projects for the purpose of capital construction. This executive order recognizes DAHP as the environmental agency with special expertise in cultural resources (WAC 197-11.920). Consultation is the responsibility of the State agency with the capitol construction project and requires a face to face meeting with affected Tribes.

The State of Washington Department of Ecology is the Lead Agency for the Project and is responsible for consultation and distribution of this report to the appropriate parties.

3.0 TRIBAL CONSULTATION

Agencies for the federal government recognize the long and unique relationship that the federal government has had with federally recognized Indian tribes. These responsibilities have grown from the historic relationship between the Federal government and the Indian tribes including treaties, public laws, policies, statutes, and executive orders. Paramount of these relationships are the treaties in which tribes have ceded portions of aboriginal lands to the U.S. Government in return for promises to protect tribal rights as self-governing communities within reservation lands as well as certain rights to use resources from non-reservation lands.

The Samish Nation, Swinomish Indian Tribal Community, and the Upper Skagit Indian Tribe consider the project area within their shared use area. The Tribes will require detailed development descriptions to adequately review the project. As Lead Agency, State of Washington Department of Ecology is responsible for carrying out consultation regarding this project including providing our report to the affected Tribes. Tribal representatives are the only people qualified to determine if Traditional Cultural Properties exist within the project area, whether they will be affected by the undertaking and how any suggested management strategies might work. In discussions between Kelly Bush and Tribal representatives, it is clear that the Tribes consider this area to be culturally and historically significant and are concerned about the effects of development.

4.0 BACKGROUND

Any archaeological undertaking requires knowledge of the physical surroundings (and their evolution) and the duration and kind of human activity in any given area. From this knowledge, archaeologists are able to develop the current best method to carry out field investigations. For example, environmental factors play an important role in the location and preservation of archaeological sites. Sediments and soils are of particular interest to cultural resource managers because they can be used for reconstructing past landscapes and landscape evolution, in estimating the age of surfaces and depositional episodes, and providing physical and chemical indicators of human occupation (Holliday 1992).

4.1 Physical Environment

The Project sits between Puget Sound and the North Cascades in a low elevation river valley. The Project is located at Maddox Creek which flows west and drains into the Skagit River. The property is

off of South Laventure Road, northwest of Little Mountain, southeast of Mount Vernon, Skagit County, Washington.

Geology

The geology of a region is important to archaeological investigations because it lays the foundation for landforms and soil development. Like the foundation of a house it determines the shape and subsequently the human use of the landscape above it. How water and sediment move across the surface of the earth is in a great part determined by the geology of a region. This, in turn, affects how people use the land. Slope, available water, exposed bedrock, and the success of vegetation are all influenced by what is under the soil. We use the geology of the project area and the surrounding landscape to help assess the likelihood of encountering archaeological objects and features based on how the landscape would have influenced human activities in the past.

Geology Geomorphology Puget Lowland

For most of the last 2.6 million years—the Pleistocene Epoch—the Earth underwent drastic shifts in global temperature caused by periodic variations in the Earth’s orbital eccentricity, axial tilt and precession. The result has been 11 ‘ice ages,’ during which almost 30 percent of the world’s land surface was covered by sheets of ice as much as 3 kilometers (km) thick (Porter and Swanson 1998). Archaeological evidence supports an inference that the first humans entered the Americas as the most recent deglaciation progressed, and that by about 10,500 years ago, humans had populated North and South America from the Arctic Ocean to Tierra del Fuego.

As the last cold stage intensified, high-altitude valley glaciers grew in depth and extent, and through a process of coalescence formed the Cordilleran Ice Sheet, centered over the Pacific Northwest’s mountain ranges: Coast Mountains, Cascade Range, Olympic Mountains, Columbia Mountains and Rocky Mountains. Further east in North America, ice simply accumulated in place, creating the Laurentide ice sheet, centered over Hudson Bay. During the cold periods (‘glacials’ or ‘glaciations’) so much of the world’s water was stored as ice that global sea level dropped by as much as 150 meters (almost 500 feet). At the same time, beneath the ice Earth’s crust was depressed by the enormous weight. Thus, during the last glaciation, much of what is now the coastline was below present-day sea level. The most recent glacial period—the Fraser Glaciation—began about 25,000 years ago and ended by about 10,000. In that time the ice advanced and retreated twice in what is now the area of Puget Sound, first during the Everson Creek Stade and most recently in the Vashon Stade (Easterbrook 1986). At the height of the Vashon Stade—about 17,500 years ago—the Project area was under as much as 2 km of glacial ice (Porter and Swanson 1998:206). By about 16,500 years ago the ice was retreating—exposing the Puget Lowland and Cascade Range, and glacial meltwater carried rivers of sediment onto the lowlands, mantling the area with deep deposits that subsequent stream activity covered with alluvium in river valleys and built out deltas in Puget Sound.

As the ice sheets finally retreated the land rebounded and sea level rose. The precise timing of sea-level stabilization (eustasy) and the rate of post-glacial rebound (isostasy) varied from place to place due to a complex interplay between the underlying geology and the surficial geological processes that predominated at any given location. In the Pacific Northwest, most of the coastline has been within a few meters of present-day sea level for about the last 6,000 years (Anundsen et al. 1994), while in the northernmost parts of the Northern Hemisphere the land is still rebounding (Thorson 1980, 1989). Yet, in the Hakai Passage region of the central British Columbia coast, due to the particulars of geology and movement of the receding ice sheet, sea level has been relatively stable for most of the past 15,000 years (McLaren et al. 2014).

On the Salish Sea the picture is equally complex. Due to the gradual south-to-north progression of deglaciation and the relatively rapid rise of sea level in the early postglacial period, sea level in the southern Puget Sound was about 40 meters below its present elevation by 8,000 years ago (Thorson 1989). By contrast, in the northern Puget Sound at the same time, sea level was only about 10 m below its present elevation (Clague 1983; Easterbrook 1963; Kelsey et al. 2004; Thorson 1989).

Across the globe, sea level has been rising gradually since about 8,000 years ago. By about 5,000 years ago, sea level across Puget Sound was about 2 to 3 m below its present level; it reached its present-day elevation only in the last 1,500 years or so (Kelsey et al. 2004; Sherrod et al. 2000). For all these reasons, even though people have been in the region for 14,000 or more years, evidence for human occupation near the present Puget Sound coastline dates to the time since sea level stabilized at or near its present elevation. In general, evidence of earlier coastal occupation has been inundated by the encroaching sea.

Surface Geology

Qgdm(e) represents Everson glaciomarine drift. Qa(S) represents Holovene alluvial sand.

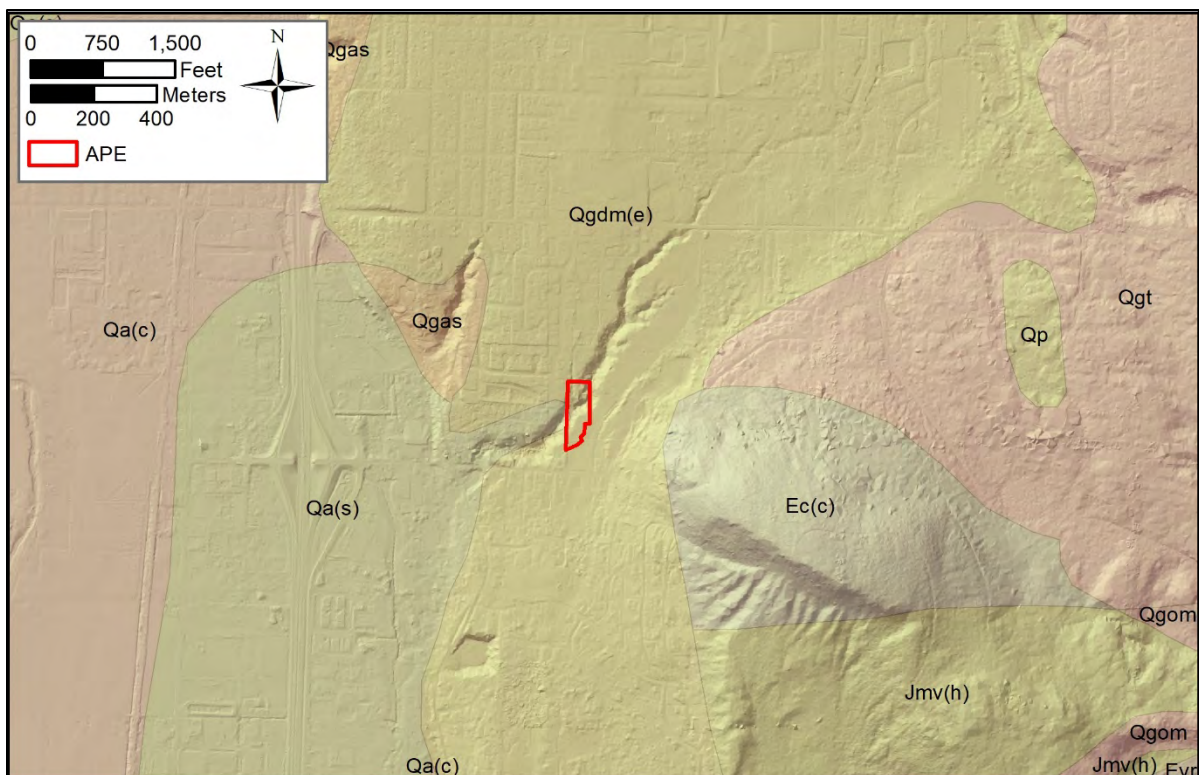


Figure 6: Map of surface geology (Washington Division of Geology and Earth Resources 2016).

Soils

A soil complex consists of areas of two or more soils, so intricately mixed or so small in size that they cannot be shown separately on the soil map. Each area of a complex contains some of each of the two or more dominant soils, and the pattern and relative proportions are about the same in all areas.

There are three soil types within the Project area: Bow gravelly loam, Hoogdal Silt loam and Vanzandt very gravelly loam (Soil Survey Staff 2018).



Figure 7: Soil Map showing the three soil types within the APE (Soil Survey Staff 2019).

(17) Bow gravelly loam is distributed on gravelly glacial drift over glaciolacustrine material with a mantle of volcanic ash. It is deep, somewhat drained. A typical profile consists of 0 to 7 inches: gravelly loam; 7 to 16 inches: very gravelly loam, 16 to 17 inches: very gravelly sandy loam, 17 to 23 inches: silt loam, 23 to 31 inches: silty clay, 31 to 48 inches: silty clay, and 48 to 60 inches: silty clay.

(69) Hoogdal silt loam, 30 to 60 percent slopes is distributed in terraces, in loess and glaciolacustrine deposits. It is moderately well drained with the depth to the water table of about 18 to 24 inches. A typical profile consists of 0 to 6 inches: silt loam, 6 to 17 inches: silty clay loam, and 17 to 60 inches: silty clay.

Climate and vegetation

After about 7,000 years ago, cedar and hemlock increased in abundance relative to other tree species and became dominant by about 5,000 years ago. This marked the establishment of the modern climate regime of western Washington, characterized by cool, moist conditions and closed climax forests with western hemlock, the dominant climax species in the lowland forest (Kruckeberg 1991:123; Tsukada et al. 1981; Whitlock 1992). Changes in climate since then have been smaller-scale periods of warming

and cooling, but no significant changes in Puget Lowland vegetation have been recorded until extensive land clearing by nonnative settlers in the 19th century (Leopold et al. 1982). Although today the APE is lightly developed and surrounded by residential building and native vegetation, the plants that local Native American communities relied upon for food, fuel, medicine, and raw material have been available in the immediate vicinity and may have been cultivated in some locations by Native Americans (Deur and Turner 2005; Gunther 1945).

4.2 Cultural Environment

The APE lies in a region that Native Americans had inhabited for at least 10,000 years by the time of contact with Europeans, when Salishan-speaking people occupied vast tracts in the Columbia and Fraser River basins, the inland waters of the Salish Sea, the Puget Lowland, the Cascade Range, and parts of the Pacific Coast between the Columbia River and the Olympic Peninsula. First contact with European explorers took place in the late sixteenth century, with Euro-American settlement beginning in the early nineteenth century and increasing after the Donation Land Claim Act of 1850. Here we present a synopsis of the archaeological cultures, traditional Coast Salish lifeways, and pertinent details of the time since Euro-American occupation.

A detailed description of Puget Sound's traditional Coast Salish cultures is beyond the scope of this report. Instead, we present a broad overview of their traditional lifeways, including what is known of the precontact cultures, using knowledge gained from archaeology, ethnography, ethnohistory, and the historic record. For in-depth descriptions of traditional Coast Salish culture, readers are directed to the following references: Adamson (1969), Ames and Maschner (1999), Amoss (1977a, 1977b, 1978, 1981), Ballard (1929), Bierwert (1990, 1993, 1999), Boyd (1994, 1999), Curtis (1913), Dewhirst (1976), Eells and Castile (1985), Elmendorf (1971, 1974, 1993), Guilmet et al. (1991), Gunther (1928, 1945), Haeblerlin and Gunther (1930), Harmon (1998), Harris (1994), Howay (1918), Jorgensen (1969), Kew (1972, 1990), Mansfield (1993), B. Miller (1993, 1995, 1997, 1998, 2001), Miller and Boxberger (1994), J. Miller (1988), Mooney (1976), Riley (1974 [1953]), M. Smith (1941, 1956), Spier (1935, 1936), Stewart (1973, 1977, 1979, 1984, 1996), Suttles (1957, 1958, 1960, 1987, 1990a, b), Suttles and Lane (1990), Tollefson (1992), Tollefson et al. (1996), United States (1859), United States Bureau of Indian Affairs (1993), United States Court of Claims (1933), Waterman (1920), Waterman et al. (2001) and Whitlam (1983).

Archaeological cultures

Archaeological evidence of human presence in Western Washington is at least 10,000 years old in the upland areas, evidenced by finds of Clovis and other early postglacial cultural traditions (Ames and Maschner 1999). Although people have been in the region all along, many archaeological sites on the relatively narrow strip of near-shore landscape were inhabited for the first time between 5,000 and 1,500 years ago due to sea-level changes that resulted from a complex interplay of climatic and geological processes whose magnitude and influence varied with location.

For example, large-magnitude changes in sea level can be due to the volume of water contained in Earth's glaciers and polar ice caps, but smaller (but nonetheless significant) changes can be caused by thermal expansion and contraction. At the same time, the earth's crust is dynamic. So, for example, the marine shoreline (continental margins) was significantly affected by depression and rebound in response to the weight of glaciers that formed during the last Ice Age. Smaller-magnitude changes occur due to the evolving global ocean basin morphology (and thus capacity) due to plate tectonics and coastal buildup and erosion, such as delta formation and growth.

Despite having knowledge of these processes, and a broad understanding of how they combine in sometimes predictable ways to determine the marine-terrestrial interface at any given time, the

variability inherent in each process means that each locality has its own unique history of sea-level change. Perhaps none is more illustrative of this than the Hakai Passage region of the central British Columbia coast, where sea level has been relatively stable for most of the past 15,000 years (McLaren et al. 2014) and impressions of human feet have been discovered preserved in clay that date to 13,200 years ago (CBC 2016).

In Western Washington the picture is also complex. Due to the gradual south-to-north progression of deglaciation and the relatively rapid rise of sea level in the early postglacial period, in the southern Puget Sound sea level was about 40 meters (m) below its present elevation by 8,000 years ago (Thorson 1989); any archaeological evidence of human activity near the shoreline at that time and place would now be under 40 m of water. By contrast, in the northern Puget Sound 8,000 years ago sea level was about 10 m below its present elevation (Clague 1983; Easterbrook 1963; Kelsey et al. 2004; Thorson 1989).

Across the globe sea level has been rising gradually since that time. At about 5,000 years ago, sea level across Puget Sound was about 2 to 3 m below its present level; it reached its present-day elevation only in the last 1,500 years or so (Kelsey et al. 2004; Sherrod et al. 2000). For all these reasons, even though people have been in the region for 10,000 or more years, evidence for human occupation on the Puget Sound shoreline is often found to date to the time since sea level stabilized at or near its present elevation.

As sea level rose in the early and middle Holocene, river valleys in the Puget Lowland gradually filled with sediment, burying any early archaeological sites in the near-stream areas. Thus, evidence for early human occupation around Puget Sound is usually found at higher elevations, on landforms that retain sediments from those earlier times. In those upland areas, where sea level change has had no effect on archaeological visibility, evidence from the early Holocene is widespread, but well-dated contexts are extremely rare—most archaeological assemblages are ‘dated’ by their formal similarity to those recovered from dated contexts. Here we mention only the few well-dated archaeological occurrences.

The earliest period is represented by the Lower Bear Creek Site (45KI839), near the shore of Lake Sammamish, which yielded artifacts belonging to the Paleo-Indian tradition beneath a peat deposit that dates to 9,860 years ago (Kopperl et al. 2015). In the North Cascades National Park near Marblemount and Newhalem in the Skagit River basin, the Cascades Pass site yielded artifacts and a cooking feature beneath Mazama volcanic ash, estimated to be 9,600 years old (Steury 2016). The Beech Creek Site (45LE415) in the Gifford Pinchot National Forest of southwestern Washington represents another early Holocene archaeological culture, the Stemmed Point Tradition, at 9,200 years old (Mack et al. 2010).

In the Puget Sound regional cultural chronology, the Olcott Phase (ca. 10,000 to 7,550 years ago) succeeds the Fluted Point and Stemmed traditions. Olcott assemblages are remarkably similar to others attributed to the Old Cordilleran Tradition, well known from other parts of the Northwest Coast (Chatters et al. 2011). Typical Olcott artifacts include “Cascade” leaf-shaped bifaces, which bear distinctive edge grinding on the stem, or hafting portion, and often-heavily patinated expedient stone artifacts of medium- to coarse-grained raw material and lacking in fine-grained silicates. One can imagine that sites with such artifacts are the result of people arriving on this landscape for the first time, without intimate knowledge of sources of fine-grained tool stone such as chert and obsidian.

Again, although there are numerous sites ascribed to the Olcott Phase, securely dated components are rare, as evidenced by the few mentioned here. Thermoluminescence (TL) dating of fire-modified rock (FMR) from the Woodhaven Site (45SN417), near Granite Falls, produced median dates of 9,316 and 7,886 years ago (Roger Kiers in Baldwin and Chambers 2014). Two other Olcott Phase sites near

Granite Falls, 45SN28 and 45SN303, yielded TL dates on FMR in the same age range, between 7,340 and 9,650 years ago (Chatters et al. 2011).

Between about 7,550 and 4,000 years ago—often termed the middle Holocene—well-dated archaeological sites are more numerous, in part due to the gradual stabilization of sea level near present elevations. The archaeological cultures are called by many names, but the Marymoor Phase and Charles Culture (or Mayne Phase in the San Juan/Gulf Islands) seem most common in the region. Many include microblade technology. Sites in the region dated to the middle Holocene include Cattle Point (45SJ9) on San Juan Island (King 1950), the Glenrose Cannery Site (DgRr-22) near Vancouver, B.C. (Matson 1976), the Milliken Site (DjRi-3) near Yale, B.C. (Borden 1960), and Pender Island (DeRt-1 and -2) in the Gulf Islands, the northern extension of the San Juan Islands (Carlson and Hobler 1993), the Marymoor Site (45KI9) in Redmond (Greengo and Houston 1970) and the Cascade Pass (45CH221) (Mierendorf and Foit, Jr. 2008). Some of these are the earliest coastal shell midden sites.

Beginning roughly 5,000 years ago western red cedar became more prevalent in the coastal forests and archaeological evidence reveals the intensification of its use by the people living on the Salish Sea. Specifically, in the Locarno Beach Phase (3,300–3,500 to 2,500 years ago) and the succeeding Marpole Phase, the woodworking triad of the antler wedge, polished nephrite adze bit and hand maul formed an increasingly prominent part of coastal shell middens (Hebda and Mathewes 1984). In addition, evidence for large post and plank houses and food storage comes to the fore (Matson 2010). Artifact assemblages from this time also illustrate increasing social complexity in the form of personal adornment—e.g. finely made nephrite and jadeite labrets—refinements in procurement technology—e.g. ground slate knives, toggling harpoons and fishing paraphernalia—and ascribed status in the form of status symbols interred with infants and very young children, and cranial deformation. These archaeological manifestations comprise the climax Northwest Coast cultural pattern that was encountered when Europeans first visited the region. Among the best known archaeological sites in the region, the Ozette site (2,500 to 500 years ago) (e.g., Daugherty and Fryxell 1967) and the Hoko River site (3,000 to 1,700) (Croes 1995) on the Olympic Peninsula preserved botanical material in addition to the other artifacts common in most Northwest Coast middens, thus revealing a breadth of material culture similar to that known ethnographically, and underscoring the material and social complexity of the regional cultures that existed in the late precontact period.

Finally, the complex interplay of post-glacial geological processes meant that salmon streams were constantly disrupted by cycles of erosion and deposition, which precluded establishment of nearshore marine resources and climax salmon runs between the time of deglaciation and that of sea-level stabilization, which began around 5,000 years ago and ended approximately 1,500 years ago (Fladmark 1975). Thus, prior to about 5,000 years ago, without the abundant, predictable salmon runs, the entire region would have been populated by mobile foragers (Grier et al. 2009; Moss et al. 2007). Since that time, the rich resources available in the maritime and riverine environments allowed for a more settled existence, and the region saw establishment of permanent residential villages, increasingly dense populations and complex cultures that existed at the time of European contact (Butler and Campbell 2004; Taylor et al. 2011).

Specific archaeological findings for the APE and surroundings are discussed in the next section.

Salish Ethnography and Ethnohistory

The North Puget Sound shoreline and nearby adjacent uplands have been home to people for millennia. Ethnographic accounts, the historic record and the oral histories of the people who lived there have all provided a rich story of the lives and deaths of the area's original inhabitants. The APE would have been very near the old shoreline as the Skagit River Delta began its progradation in the mid Holocene

which puts the project area just over a mile from what would have been a shoreline estuary with a navigable marsh approximately 6,000 years ago.

Coast Salish social life. Social life began in the longhouse, a large, red cedar, post and beam structure clad in broad planks, in which up to twenty closely related families dwelt and cooperated economically. Frequently, longhouses were 100- to 200-foot-long structures, with gable or shed roofs. One or more longhouses comprised a village, usually situated advantageously with respect to the area's resources—often at the river mouth or on the main stem of the river at the mouth of a tributary stream. Each longhouse was led by the head of one of its residents' closely related families.

Within each village one of the longhouses would have had more social influence than the others. Villages, too, were often ranked, and quite often the larger villages wielded more influence. Most decisions that affected the village were undertaken within a small group of those representing individual longhouses; those decisions affecting the tribe as a whole would be made amongst the leaders of individual villages and their constituents. Skirmishes over the separate interests of house groups were avoided due to village affiliations, which reflected group solidarity rooted in a connection to the land, even more so than blood ties (Smith 1940:36).

Within and between villages, power and prestige were asserted and maintained by the Potlatch, a ceremonial feast held in celebration of important occasions, in which gifts were given by those who organized the celebration. In so doing, social and economic debts were created, reinforcing the social relationship between the giver and the recipient.

Although the groups who lived along the Skagit River were closely related, there were several subgroups inhabiting the areas along the river, its delta, Fidalgo Island, and Whidbey Island. Sampson (1972) includes a Ray Jordan map of the Skagit River peoples' tribal boundaries at the time of the Treaty of Point Elliott, in 1855. The group whose use area is close to the Project were named *Kik-i-allus* (Area 1 on Figure 8) and the *Noo-qua-cha-mish* (Area 2), and *Skagit* (labeled 12 and “fishing village only” on Figure 8). This is just one of the maps available for the project area. Like many historic or ethnographic documents, each researcher provides the data from their informants and that may only include the knowledge of one family. We consider each map we use as the very minimum representation of use in any given project area. This would be especially true in the Little Mountain area.

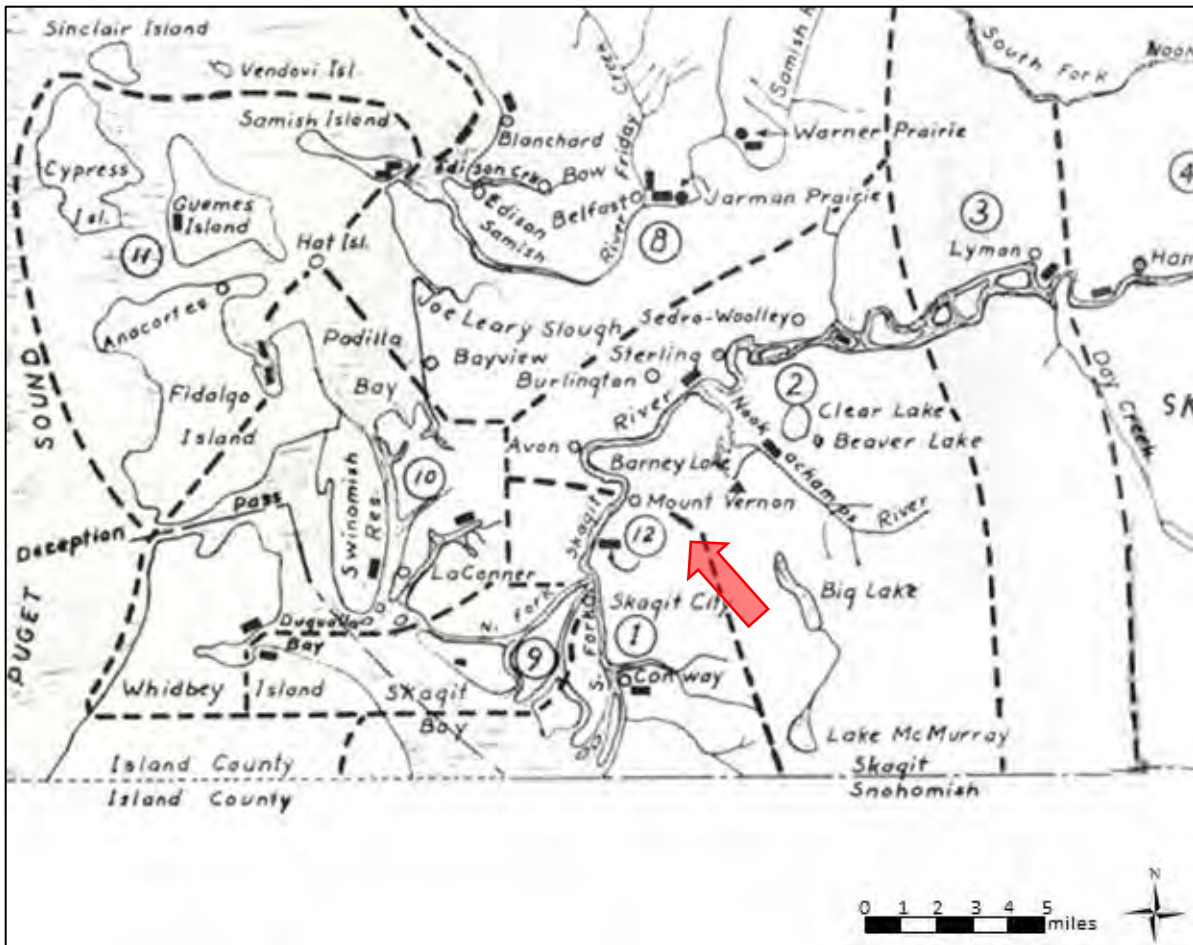


Figure 8: Traditional use areas and villages (black rectangles) around 1855 (after Sampson 1972). The red arrow indicates the APE.

Economy. Coast Salish economies are often characterized by their relationship to the sea and the abundant and predictable resources it offers in addition to the plentiful salmon. The Skagit Valley was a local and regional transportation corridor through areas suitable for settlement and resource procurement. People employed weir and net fishing and processed shellfish they collected (Smith 1940). Concerted efforts to attain high yields of resources at one location involved cooperation among family groups (Smith 1940:4). “During all the seasons of the salmon run the people busied themselves trapping, processing and storing the salmon for winter use” (Ballard 1957:43).

Many Coast Salish resources were seasonal. This applied to salmon as much as to the berries and bulbs that formed an important part of the diet. For this reason, economic life most of the year meant leaving the permanent winter village and the longhouse and setting up seasonal camps where local resources were exploited. This often entailed constructing temporary shelters of wood and waterproof mats similar to those shown in Figure 9. Mat houses like this one illustrated would have been a common structure on the prairies and riverbanks inland from the Sound. A preference for upstream routes simplified the process of returning resources to the village site by utilizing the downstream flow of the river (Smith 1940:5).

Terrestrial resources were acquired by collecting and hunting. Using digging sticks, people collected bulbs of camas, wild potato, brake and wood fern, cattail, wild carrot and others. Some plant products

were preserved and stored for use during the winter. Fruits gathered were salmonberry, huckleberry, blackberry, raspberry, salal, serviceberry, and wild strawberry, as well as acorn and hazelnut (Haeberlin and Gunther 1930:20–21). People hunted elk and deer, beaver, wildcat, bear, groundhog, cougar, as well as ducks, grouse and pheasant. Seal were hunted from canoes. As with the important salmon, all meat beyond immediate need was cured and stored for winter consumption. Trade back and forth for shellfish and other seafood for camas or dried meat was common (Haeberlin and Gunther 1930:20).

Material culture. In addition to the archaeological collections and oral histories much of what we know of traditional Coast Salish material culture derives from ethnographic collections residing in museums around the world, from the observations of ethnographers and historians, and photographs taken in the nineteenth and early twentieth centuries (e.g., Curtis 1913).

Coast Salish groups relied heavily on plants to create functional, decorative and ceremonial objects. For example, the red cedar tree provided wood for longhouses, canoes and storage containers, as well as bark that when shredded could be woven to make clothing, capes and head coverings. Cedar and spruce root were used along with other fiber to make baskets similar to those shown in Figure 10 for use when foraging or cooking, some so tightly woven that they were waterproof. Local and exotic stone was chipped or ground to fashion knives, spear, dart and arrow tips, mauls, wedges, adzes and chisels for woodworking, and ear and lip ornaments. Fishing barbs, combs, pins and many other items were fashioned from animal bone, antler, teeth and shell.



Figure 9: Example of a seasonal house, “Mat House—Skokomish” (1912) by Curtis (Northwestern University Library 2003b).



Figure 10: Examples of the kind of baskets made by Coast Salish people, “Puget Sound Baskets” (1912) by Edward S. Curtis (Northwestern University Library 2003c).

Dog wool was spun and woven on a loom to produce blankets similar to the one shown in Figure 11. Although the loom is from Vancouver Island, such looms would have been common in the Project area. Some clothing was made from bear and buckskin. Among the many uses for marine shell, clam shell disc beads—“shell money”—were used for trade (Haeberlin and Gunther 1930:29). From an archaeological perspective only special depositional circumstances could be expected to preserve most of these organic artifacts.

Summary. This overview has barely sketched traditional lifeways. The Salish People thrived for millennia and developed a rich and complex culture within an environment that supported a large population prior to European contact and the devastation of disease and political oppression. Despite these hardships, the peoples of the region have resiliency and continue to fight for renewed political and economic power, at the same time working to preserve and maintain traditional cultural knowledge and beliefs. All the areas in and around Little Mountain have high probability for use prior to waves of immigration in the past 150 years.

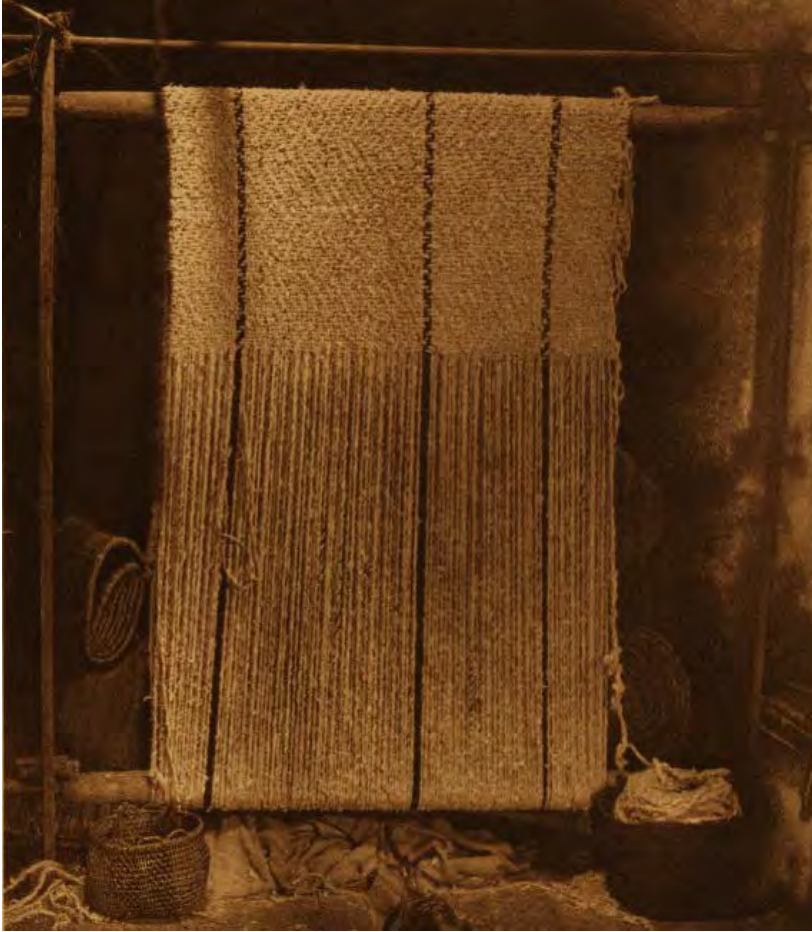


Figure 11: Example of the kind of weaving done by Coast Salish people, “Goat-hair Blanket—Cowichan” (1912) by Curtis (Northwestern University Library 2003a).

Exploration and Immigration

The first documented exploration of the Pacific Northwest was a Spanish expedition in 1592, led by Greek-born Apostolus Valerianos, more commonly known as Juan de Fuca, after whom the entrance to the Salish Sea is named. Between 47° and 48° north latitude—after entering a “broad Inlet of the Sea” de Fuca traveled for “twentie dayes ... passed divers Ilands ... went on Land in divers places, and ... saw some people on Land, clad in Beasts skins” (Purchas 1906 [1625]:416).

Some of the earliest English-language records of this region come from George Vancouver’s exploration of the Salish Sea. On June 4, 1792, he went ashore in the vicinity of Tulalip, near today’s Everett, Washington, and claimed for King George III the coast south to 39° 20’ N, which had been his first landfall. Vancouver was convinced of the historical justification of his claim and his maps all show British Territory from about 39° north latitude northward (Hayes 1999:85). The southern portion of the Salish Sea is named after Vancouver’s lieutenant, Peter Puget. The Spanish ships the *Sutil* and *Mexicano* recorded meeting Samish people in the Guemes Channel in 1792 (Wooten 2013; Samish Indian Nation 2017). The Indian name for the river and its people remained.

The first Europeans to stay for any length of time in the Puget Sound area were traders, trappers and explorers associated with the Hudson’s Bay Company (HBC). From the 1820s through to the 1860s, HBC employees regularly traveled and traded around the Puget Sound (Harmon 1998). Tribes around

Puget Sound took benefit from trading and bartering with HBC, and many were hired as guides. Fort Nisqually was established in 1833 at the southern end of Puget Sound, the first European settlement on Puget Sound (Bagley 1915). The Snohomish traded with HBC at Fort Nisqually (Ruby and Brown 1986:213). Using the Naches, Snoqualmie, and Yakima passes through the Cascades, even the Yakima people traded with HBC at Fort Nisqually and Fort Langley, to the north. The influence of HBC in the Puget Sound was felt by native people and immigrants alike (Suttles and Lane 1990).

The United States Exploring Expedition led by Charles Wilkes was conducted in 1841 at a time when the territories of the Northwest were under contention by British and American interests. In 1845, 31 members of the Michael T. Simmons party cut a wagon trail that became the northern branch of the Oregon Trail at present-day Tumwater. Known as the end of the Oregon Trail or Cowlitz Trail, Tumwater is the oldest permanent American settlement on Puget Sound (Stevenson 1977; 1986:158). The discovery of gold in the Fraser River in 1858 brought more Euro-Americans (Jeffcott 1995).

The Donation Land Claim Act of 1850

The pace of immigrant settlement was encouraged by the US 31st Congress, with the 1850 passage of Statute 496, an unnamed Act known by various names, most commonly as the Donation Land Claim Act, which legitimized a practice originally set in motion by the territorial Provisional Government in 1843 (Oregon Encyclopedia 2017). The Act was

to create the Office of Surveyor-General of the Public Lands in [the] Oregon [Territory], and to provide for the Survey, and to make Donations to Settlers of the said Public Lands. ... granted to every white settler or occupant of the public lands, American half-breed Indians included ... three hundred and twenty acres of land, if a single man, and if a married man ... the quantity of one section, or six hundred and forty acres, one half to himself and the other half to his wife, to be held by her in her own right ... [US Statute 496, September 27, 1850]

The law explicitly excluded African Americans and Hawaiians. Prior to its enactment Territorial Delegate Samuel Thurston had told Congress that extinguishing Indian title was the “first prerequisite step” to settling Oregon’s land question, so Congress had earlier authorized commissioners to negotiate treaties with that would, among other things, remove Native Americans from their land (Oregon Encyclopedia 2017). What followed were the 1854 Treaty of Medicine Creek, the 1855 Treaties of Point Elliott, Point No Point, Neah Bay, Yakama, and Walla Walla, and the Quinault Treaty of 1856, by which the Native American tribes ceded their lands in return for continued resource procurement rights, ‘reservations’ (for some, but not all of the tribes), and a one-time payment. Once the treaties were in place, settlement and commercial exploitation of previously tribal lands proceeded almost unfettered.

Mount Vernon History

The Skagit River shaped early historic settlement in Mount Vernon, as immigrant settlers built along the lower reaches of the Skagit River beginning in 1870, with the arrival of Joseph Dwelley and Jasper Gates who took up claims where the town of Mount Vernon now stands (Willis 1973:27). Two expansive log jams in the vicinity of Mount Vernon, one roughly 2 miles long and another approximately 1.5 miles long, prevented easy access to areas upriver (DeLorme 1977:11; Willis 1973:22). Prospectors first explored east of the logjams in 1858 (Willis 1973:27) [Figure 12]. Removal of the log jams enabled upriver settlement and development of logging and mining in the Cascades. After much deliberation and numerous failed requests for governmental assistance, privately funded removal of the log jams began in 1876. Two channels were cut by 1879, and it took another 10 years to entirely clear the log jams (DeLorme 1977:11; Willis 1973:40).

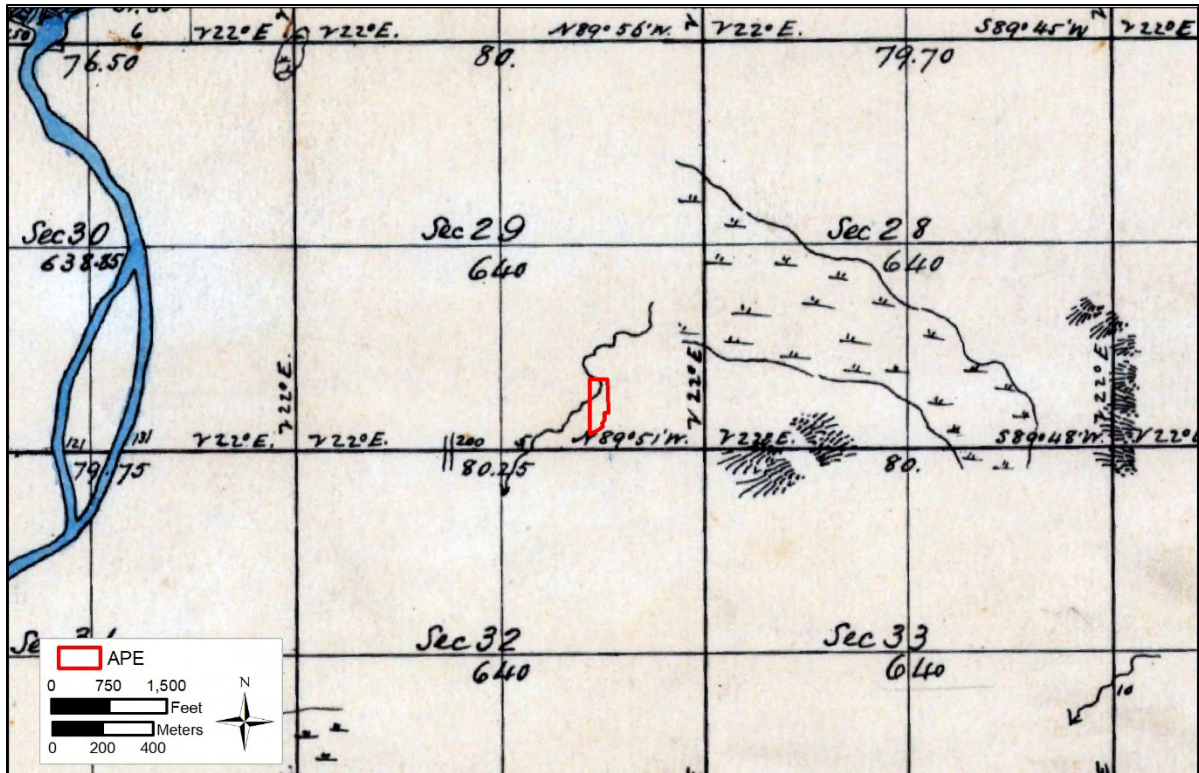


Figure 12: 1875 General Land Office Map of the APE and vicinity.

River Corridor

Officially founded in 1877, Mount Vernon “based its early growth on the traffic of the steamers and canoes that brought settlers, carried their supplies, outfitted prospectors and miners, and bore to market whatever saleable products the locality had to offer” (Willis 1975:62). Even after logjam removal in 1879, the Skagit River experienced detrimental seasonal floods. Townspeople regularly petitioned for governmental assistance to create improvements along the riverbank to protect property, but early efforts were privately funded affairs. Diking efforts in the 1870s reclaimed acreage for farming, but flooding remained a constant problem. Mount Vernon was officially incorporated as a town by 1877 and became the county seat in 1884. Skagit County legislators held a special session for commissioners and surveyed actual conditions, which led to the establishment of diking districts in the valley (DeLorme 1977:19).

Although there were some early attempts to build flood protection levees along the river, the first real effort to reign in the floods began in the 1890s, especially after the major floods of 1892, 1893, and 1894. By 1894 the Skagit River had been substantially diked from its mouth to beyond Sedro Woolley, which improved conditions, but did not always prevent flood damage. The flood of 1894 inundated the Skagit floodplain as far as 42 miles upriver to Marblemount. A flood in 1909 covered almost the whole delta (Willis 1975:170–173).

Today Mount Vernon has a state-of-the-art set of flood walls through the downtown corridor that have been deployed successfully on more than one occasion and have provided enough security that local businesses no longer have to pay outrageous flood insurance.

Railroads

With the arrival of the transcontinental railroads and the development of the logging industry, Mount Vernon became an important transportation and transshipment center for goods moving downriver from the interior and north–south along the Puget Lowland. In 1894, Northern Pacific advertised “Pullman sleeping cars, elegant dining cars, [tourists] sleeping cars to St. Paul, Minnesota” (Mount Vernon Record 1897). The Canadian Pacific Railway left Mount Vernon for St. Paul daily and for Boston and Toronto once a week.

Several local railroads moved goods up and down the Skagit River. In 1889 the Fairhaven and Southern Railway connected Bellingham Bay to Sedro at the north bank of the Skagit River. The Seattle, Lakeshore and Eastern linked Seattle through the long north–south valley containing Clear Lake, Beaver Lake, Big Lake, and Lake McMurray, and continued on north through Woolley and on to Sumas at the Canadian border. The Seattle and Northern was incorporated in 1888 and began construction in 1889 at Anacortes. Mount Vernon contributed the right of way when the Great Northern came through in 1891, which connected the Skagit River to the railroad (Willis 1973:141). By 1893, the first railway bridge was completed across the Skagit River. In 1911, the Bellingham and Skagit electric interurban railway opened between Mount Vernon and Bellingham, creating additional transportation routes for people and goods. Its southern terminus was on Main Street between Pine and Kincaid streets. In 1939 the Mount Vernon Terminal Railway Company formed and purchased 1.5 miles of rail west of the River for one dollar as the railroad industry waned (Thompson 1989:163).



Figure 13: Mount Vernon depot in 1911 (now the Skagit Brewery) (courtesy City of Mount Vernon)

Timber Industry

After local entrepreneurs cut through the Skagit River log jams near Mount Vernon in 1876, the first steamer, the *Fanny Lake*, arrived in Mount Vernon in 1877 (Willis 1973:40, 70). Removal of the log jam at Mount Vernon allowed for increased trade and transport between Conway, Fir Island, La Conner and Milltown, as did the arrival of the Great Northern in 1891 (Willis 1975:53).

Freshly cut timber arrived at the mills via narrow-gauge logging railroads. The Puget Sound and Cascade Railroad carried logs from Finney Creek to Sedro Woolley. Construction of the line began in 1911, and the first load of logs was shipped out in late 1912. The new railroad consisted of 10 miles of track, three locomotives and forty cars. By 1922, the line had been extended over Nookachamps Creek and up the Skagit River (Thompson 1989). In 1912 the Slosson Logging Company opened shop after Fred Slosson bought timber on Lincoln Hill overlooking Mount Vernon. In two years Slosson had logged all his timber, using horse-drawn wagons to transport the hauls downhill to the railroad (Thompson 1989:235).

The closest logging railroads to the project area belonged to the English Logging Company. Sometime around 1900, Edward G. English began building railroads to transport logs from his logging camps to the Great Northern Railroad mainline through headquarters near Conway. Between 1914 and 1920 the English Lumber Company Camp 5 operated at Little Mountain, about two miles southeast of Mount Vernon (Figure 14). The English Lumber Company’s activities heavily influenced the Skagit lumber industry. Camp 5 logged west to Little Mountain, north to what is now Mountain View Road and east to the hill overlooking Big Lake. Timber from Little Mountain and south Mount Vernon was removed over the 119-foot-high Sandy Creek Trestle, constructed in 1914 (Thompson 1989). Archaeologists have recorded six segments of the English Lumber Company logging railroad in the form of 10-foot-wide, and six-foot-deep cuts that fluctuate with the slope of the landscape (Shantry 2007).



Figure 14: 1917 map showing logging railroads in the Mount Vernon vicinity (after Map No. 15 in Thompson 1989:182)

Commercial District

The first businesses in Mount Vernon included the Hotel Brooklyn (which burned in an 1891 fire), a post office, restaurant and store (Mount Vernon Record 1897; Willis 1973:70). Harrison Clothier and

Edward G. English ran the store and named the town Mount Vernon. The two men served in politics and developed enterprises as the town grew around their store—Clothier & English (Caldbick 2010; Willis 1975:62). Carpenter, a saw-miller, built the Grand Central Hotel in 1894 (Interstate Publishing Company 1906:521). In 1897 the local newspaper advertisements included a bakery, clothing store, grocery, jewelry store, three supply stores and two tailors (Mount Vernon Record 1897).

During the 1880s, business ventures in Mount Vernon were primarily focused on the transitory visitors to the town; the commercial district was a small collection of hotels and saloons. In 1881, the town had 75 permanent residents and remained, “a rough, uninviting little town, overshadowed in population and cultural amenities by La Conner and rivaled by Skagit City” (Willis 1973:70); by 1929 Skagit City had outlived its popularity (Willis 1975:47).

Throughout the 1880s, commercial growth in Mount Vernon “faced the river along First Street while the steamers docked on the west side of the street” (Willis 1975:62). A fire in 1891 destroyed 16 businesses and two residences, essentially most of the waterfront. Since this was the year that the railroad reached the town, rebuilding efforts turned away from river and focused on the new rail station (Willis 1973:172). The telephone reached Mount Vernon in 1894 (Willis 1975:131).

Agriculture

Almost all early farms kept small herds of dairy cattle and creameries developed after 1895. Approximately 900 small family dairy farms existed in Skagit County at the turn of the twentieth century (Oakley 2004). Major changes occurred with the advent of pasteurization and the increase of milk production due to the introduction of purebred stock. Larger companies such as Darigold and Carnation bottled for the small dairies. Leon Chevally opened the Mount Vernon Creamery in 1904 on the riverbank the same year the Pacific Coast Condensed Milk Company opened north of the bridge (Interstate Publishing Company 1906:201; Willis 1975:103–105).

By the 1930s many small businesses sold their operations when regulations increased costs (Willis 1973:27). Between 1937 and 1948 four canneries operated in Mount Vernon: Bozeman Canning Co., Pictsweet Foods, Inc., San Jan Islands Cannery and Skagit Custom Canning. By 1954, three remained, eventually succeeded by frozen food companies Libby, McNeil & Libby, which Stokely–Van Camp acquired in 1974 (Thomas/Lane & Associates & Bill Mundy and Associates 2014:102).

Highways

Interstate 5 was completed in the 1960s, using an existing split-lane highway for the section from Marysville to the Canadian border. The construction of this highway through the center of downtown Mount Vernon solidified its links with other cities along I-5 including Seattle, Everett and Bellingham (Caldbick 2010).

Today Mount Vernon is the largest city in Skagit County with a population of 33,530 in 2015. The farming economy is still strong, although the private, service-providing sector in Skagit County accounts for 57% of nonfarm jobs in 2014 (Vance-Sherman 2015).

5.0 PREVIOUS ARCHAEOLOGY

The earliest archaeological studies of the area are H.I. Smith’s (1900, 1907). More recent local archaeological work can be found in Avey (1991), Blukis Onat and Kiers (2007a, 2007b), Greengo (1983), Kidd (1964), Larson and Lewarch (1995), Lewarch (1979), Lewarch and Larson (2003), Lewarch et al. (2005, 2006), Mattson (1989), Miss and Campbell (1991), NWAA/EHC (2007), Rooke et al. (2002), Samuels (1993), and Stein and Phillips (2002). For general overviews of the archaeology and cultural resources of the Northwest Coast, see Ames (1995, 2003, 2005a, 2005b), Ames and

Maschner (1999), Borden (1950, 1951, 1962, 1968, 1975), Boyd (1998, 1999), Burley (1980), Butler (1961), Butler and Campbell (2004), Campbell (1991), Carlson (1990), Carlson and Dalla Bona (1996), Erlandson et al. (1998), Fladmark (1975, 1982), Matson and Coupland (1995), Matson et al. (2003), Meltzer (2004), Meltzer and Dunnell (1987), Mitchell (1971, 1990), Nelson (1990), Pratt (1992), and Prentiss and Kuijt (2004, 2012). Just southeast of the Project, ERCI performed a cultural resource survey at Little Mountain (Nichols and Bush 2020).

Previously Recorded Archaeological Sites

Records of four archaeological sites within about one mile of the Project area are on file at the Washington State Department of Archaeology and Historic Preservation (DAHP). A short description of the sites is provided below, and summarized in Table 1.

Table 1: Previously recorded archaeological sites within one mile of the Project area.

Site #	Type	Distance (Miles)	Citations	NRHP Eligibility
45SK521	Historic Agriculture, Historic Objects	~0.2	Raff-Tierney 2014	Potentially Eligible
45SK468	Historic Railroad Properties	~0.8	Shantry 2007	Potentially Eligible
45SK40	Precontact Shell Midden	~0.45	Conca 1985, Bryan 1953, Meyer 1974a, Emerson 1959, Onat 1979	Survey/Inventory
45SK64	Precontact Shell Midden	~0.85	Meyer 1974b, Dancy 1969	Survey/Inventory

45SK521—Belsaw Light Sawmill is a historic site near the toe of Little Mountain on a gentle slope approximately 0.2 mile from the Project area. Raff-Tierney (2014) recorded the remains of a sawmill while conducting a reconnaissance survey. Equipment found on site date to the mid-twentieth century (Raff-Tierney 2014).

45SK468—English Lumber Company Logging Railroad is a historic railroad site in forested foothills approximately 0.8 miles from the Project area. Shantry (2007) encountered six segment cuts of the English Lumber Company railroad. Historic aerials were used in corroborating the affiliation.

45SK40—Delta Margin Midden is a culture-rich precontact shell midden site on a low terrace and alluvial flats, along the banks of an old slough approximately 0.45 miles from the Project area. Bryan (1953) recorded the site as slightly disturbed and recommended further excavation. Emerson (1959) recorded the dimensions of the site as 30 x 10 x 4 m during a pedestrian survey and noted that there appeared to be some intact culture-rich shell midden on the site. Meyer (1974a) updated the site form. Onat (1979) reported that the site was now 80% destroyed.

45SK64 is a culture-rich precontact shell midden site at the edge of the Skagit flood plain at the base of Little Mountain approximately 0.85 miles from the Project area. Dancy (1969) encountered culture-rich shell, fire-modified rock (FMR) and charcoal at the site that was seriously disturbed by construction. Meyer (1974b) observed a culture-rich shell layer with charcoal that was 10-15 inches thick.

Previous Cultural Resource Reports

There are nine reports on file with DAHP from previous cultural resource surveys within one mile of the Project area; they are listed below in Table 2, along with annotations for those that included subsurface investigation such as shovel test pits (ST), machine tests (MT) or monitoring.

Table 2: Previous cultural resource reports on file with DAHP.

Author	Title	Date
Arthur and Baldwin	<i>Archaeological Assessment of the Anderson/LaVenture Road Extension Project- Phase 2, Mount Vernon, Skagit County, Washington. No subsurface investigation. No cultural resources.</i>	2009a
Arthur and Baldwin	<i>Archaeological Assessment of the Anderson/LaVenture Road Extension Project- Phase 3, Mount Vernon, Skagit County, Washington. 12 STs. No cultural resources.</i>	2009b
Arthur	<i>Cultural Resources Assessment for Petroleum Contaminated Sediment Remediation at 3408 Cedardale Road, Mount Vernon, Washington. 7 STs. No cultural resources.</i>	2018
Baldwin et al.	<i>Archaeological Assessment of the Anderson/LaVenture Road Extension Fowler to Blackburn Project, Mount Vernon, Washington 22 STs. No cultural resources.</i>	2009
Baldwin	<i>Cultural Resources Review of Parcels P28041 and P28043 at Little Mountain Park, Mt. Vernon, Skagit County Washington. No subsurface investigations. No cultural resources.</i>	2013a
Baldwin	<i>Cultural Resources Review of the Proposed Skagit County Jail Sites, Mount Vernon, Skagit County Washington. 4 MTs. No cultural resources.</i>	2013b
Iversen	<i>Cultural Resources Assessment for the East Village Short Plat Project, Mount Vernon, Skagit County, Washington. 15 STs. No cultural resources.</i>	2017
Iversen and Osiensky	<i>Cultural Resources Assessment for the Blackburn Village Project, Mount Vernon, Skagit County, Washington. 35 STs. No cultural resources.</i>	2019
Schultze et al.	<i>Cultural Resources Inventory for the Little Mountain Sky Ridge Reservoir Road and Pipeline Project, Skagit County, Washington. 23 STs. Cultural resources associated with 45SK521.</i>	2014

National Register Properties

Records of two National Register properties and one Washington State Register property within one and a-half miles of the Project area are on file with DAHP. A short description is provided below and summarized in Table 3.

45SK441—*President Hotel* was built in 1926 using brick and is five stories tall (Woo 2010).

45SK261—*Lincoln Theater and Commercial Block* was built in 1926 and is located in a wedge-shaped building made of brick and terra cotta ornament (Beckes and Pederson 1987).

45SK347—*Weaver Barn* is a shed style barn built by Jerry Weaver in 1933 and was originally used to house milk cows and horses (Lee and Lee 2007).

Table 3: National Register Properties within one and a half miles of the Project area.

Distance	NRHP	Name	Period of Significance
~1.40 miles	45SK441	President Hotel	1926
~1.35 miles	45SK261	Lincoln Theater and Commercial Block	1926

~1.49 miles	45SK347	Weaver Barn	1933
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Previous Cemetery Reports

The record of one cemetery within two miles of the Project area is on file with DAHP. A short description is provided below.

45SK394—*Mount Vernon Cemetery* is an active, well maintained cemetery established in 1890 (DAHP 2020).

6.0 METHODS

6.1 Archival Research

ERCI researchers

- Reviewed site forms and reports of previous archaeology on file at the Department of Archaeology and Historic Preservation (DAHP) in Olympia, Washington
- Reviewed other archaeological reports and related documents on file at the ERCI offices in Mount Vernon, Washington
- Reviewed published information on the precontact, traditional Native American and historic land use in the Project area, and the Salish Sea—including the Northern Puget Sound
- Reviewed the Whatcom County Assessor’s records
- Reviewed General Land Office and other historic maps

6.2 Field Methods

Professional archaeological monitoring was carried out between July 27, 2020 to August 28, 2020. ERCI’s Courtney M. Strehlow, Caspian P. Hester, and Kelly R. Bush observed all ground-disturbing activities within monitoring areas determined in the Monitoring Plan (Appendix 1) and documented their observations with handwritten notes and digital photographs. Original notes and digital photographs are stored at the ERCI offices in Mount Vernon, Washington. Appendix 2 contains the digital photograph log.

Construction monitoring activities for the Project entailed the removal of trees above the existing culvert using an excavator, the removal of the failing culvert, sculpting of the slopes including some intact sediments. Construction was performed by several different sizes of excavators and dump trucks operated by Williamson Construction.

7.0 MONITORING RESULTS

From July 27, 2020 to August 28, 2020, ERCI monitored construction activities including felling trees, excavating fill above culvert, and excavating into some intact sediment along ravine slopes as part of the shaping of the clean-up and trail (Figure 15-Figure 17). During the removal of the fill above the culvert, Williamson Construction dug a drainage swale along the west side of the Project through the north side of the ravine. Refuse identified within the fill including bricks, a horseshoe, concrete pipes, and glass bottles.

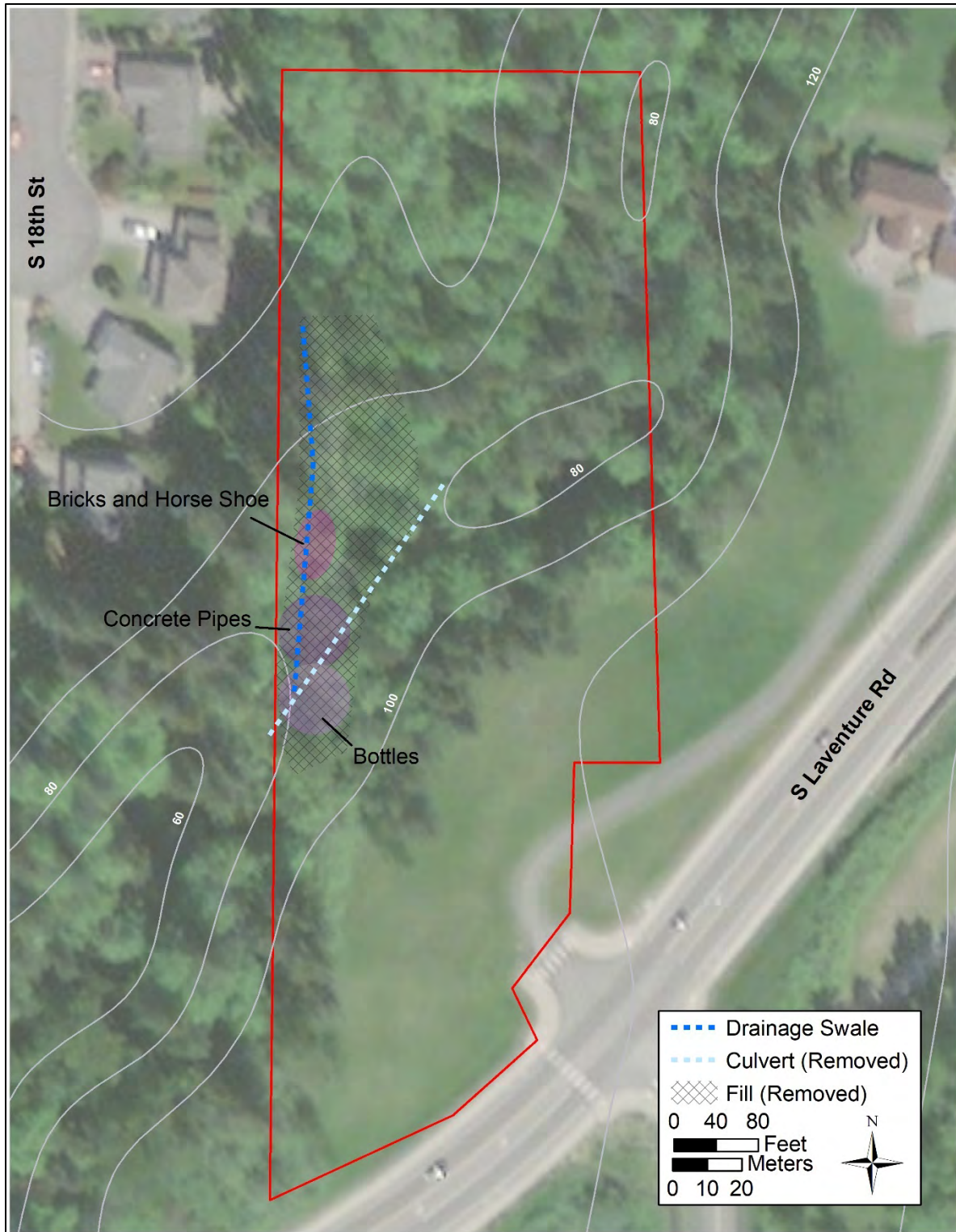


Figure 15: Sketch map of the Project.



Figure 16: View north, creek at beginning of Project on July 27, 2020.



Figure 17: View north, creek at end of Project on August 28, 2020.

7.1 Site Preparation

On July 27 to July 29, 2020, ERCI monitored felling trees and the ground disturbance from the upturned roots (Figure 18). Williamson Construction felled and moved trees using an excavator to prepare the site for excavation (Figure 19). With the excavator, they scraped or shook the sediment from the root wads of the felled trees (Figure 20). The sediment from the root wads was examined for cultural resources. The felled trees were removed from the creek ravine with a dump truck and piled near S Laventure Road.



Figure 18: View southwest, felled trees and exposed root wads.



Figure 19: View northwest, felling trees with excavator.



Figure 20: View west, scraping dirt of root wad.

7.2 Fill Removal

On July 30 to August 28, 2020 ERCI monitored excavation of fill material above the culvert. ERCI identified two fill events: a silty sand sediment over a clay sediment with rounded pebbles (Figure 21, Figure 22). Both fill events contained refuse. Several concrete pipes and concrete pipe fragments were exposed from the upturned roots in the silty sand fill (Figure 23, Figure 24).

Two bottles were located within the silty sand fill: A Log Cabin Syrup bottle and Owens-Illinois bottle. The an amber log cabin syrup bottle was 24 cm long with an oval base 11 cm by 5 cm (Figure 25-Figure 28). On both sides was an embossed diamond pattern and the numbers “1887.” On the base, “Log Cabin Syrup” and a log cabin image were embossed on the base. This bottle is likely machine made.

The Owens-Illinois bottle is 18 cm long with a circular base 5 cm in diameter (Figure 29-Figure 31). There was an Owens-Illinois Glass Company symbol on the base. The side seam goes from base through the top of the neck which means the bottle was likely machine made. The symbol on the base is an Owens-Illinois Glass Company. The Owens Bottle Company and the Illinois Glass Company merged in 1929 (Lockhart and Hoenig 2015). In 1954, Owens-Illinois Glass Company removed the diamond from the symbol (Lockhart and Hoenig 2015). This bottle likely dates from between 1929 and 1954.

Some refuse within the clay fill included a large, rusted horseshoe (Figure 32) and two identical bricks with four circles on one side, 22 cm by 10 cm by 6 cm (Figure 33-Figure 35). None of the objects were in intact sediments all had been brought in with the fill. All of the objects were recorded and then discarded.



Figure 21: View northwest, north side of creek slope profile, shows silty sand fill over clay fill.



Figure 22: View west, profile in center of culvert, shows silty sand fill over clay fill.



Figure 23: View northwest, concrete pipes exposed in silty sand fill from felled trees.



Figure 24: View east, concrete pipe diameter with scale.



Figure 25: Amber “Log Cabin” bottle from silty sand fill.



Figure 26: Amber “Log Cabin” bottle from silty sand fill., shows seam.



Figure 27: Amber “Log Cabin” bottle from silty sand fill, shows base.



Figure 28: Amber “Log Cabin” bottle from silty sand fill.



Figure 29: Owens-Illinois Glass bottle from silty sand fill.



Figure 30: Owens-Illinois Glass bottle from silty sand fill.



Figure 31: Owens-Illinois Glass bottle from silty sand fill.



Figure 32: Horseshoe from clay fill.



Figure 33: Brick with four circles from clay fill.



Figure 34: Brick with four circles from clay fill.



Figure 35: Brick with four circles from clay fill.

7.3 Grading and Reconstruction

Throughout the Project, we monitored excavation of intact sediment on the steep slopes of the creek ravine (Figure 36-Figure 39). This excavation was more of a shaving of the ravine wall that often had fill deposits beside or in the case of Figure 36 below the grade included leaving some remnant fill to preserve the trees above. The native sediment was silty sand with gravels and pebbles, medium to coarse sand alluvium sediment, or the natural creek bed comprised of sand, rounded pebbles, and cobbles. There was also, some ground disturbance at the trailhead and the flat, grassy area between the creek and S Laventure Road due to the movement of heavy equipment, and the stockpiling of material and supplies. (Figure 40).



Figure 36: View south, excavating along intact south side slope for new trail grade, remnant fill still evident here as the grade is made.

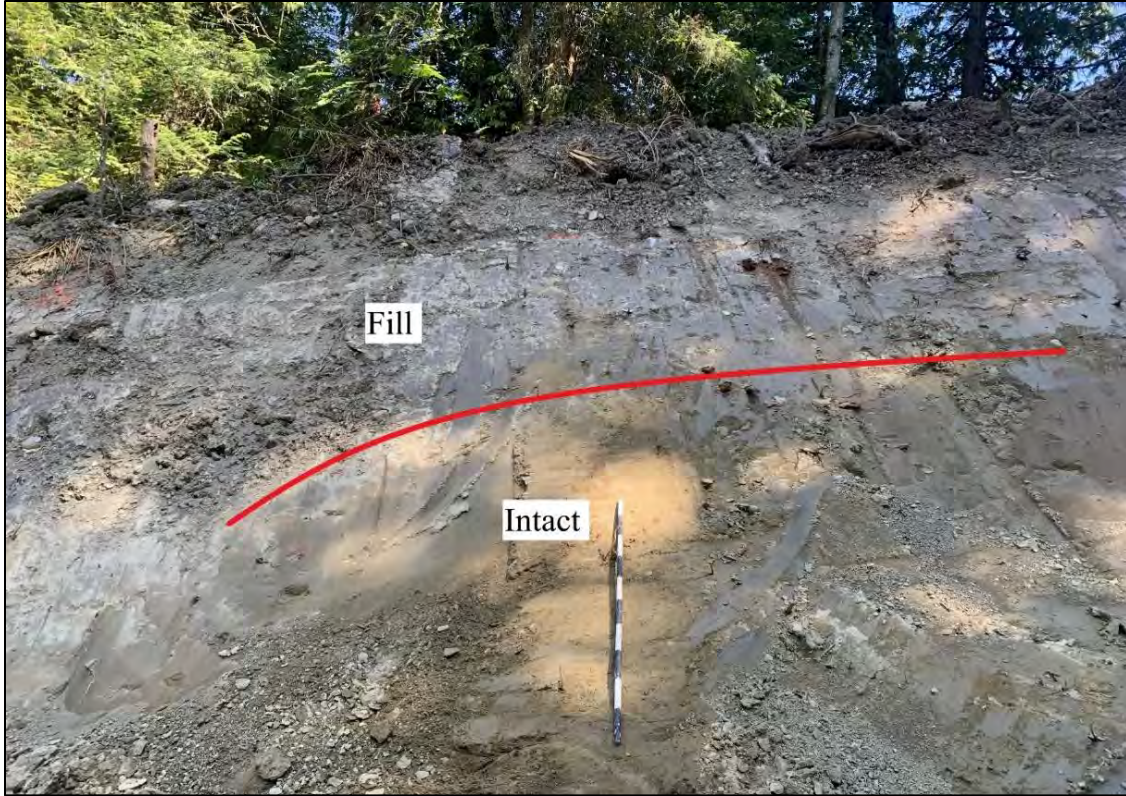


Figure 37: View east, shows silty sand fill over intact medium to coarse sand sediment near trailhead on south side of ravine.



Figure 38: View northwest, excavating along intact slope at downstream end of creek.



Figure 39: View northeast, excavating within intact creek bed.



Figure 40: View north, minor disturbance from equipment at trailhead, south of creek.

7.4 Discussion

ERCI identified two fill events, both of which contained refuse. The first fill event had a high percentage of clay sized particles with rounded pebbles and was used to fill in the creek ravine around and above the culvert. The second fill event used a silty sand sediment which was placed on top of the first fill event. Some intact sediment was disturbed on the sides of the creek ravine during the reconstruction of the creek bed. Refuse and cultural resources were only located within the disturbed fill materials. **No cultural resources were identified in the intact sediment.**

Although Maddox Creek is along a known travel corridor very little of the intact sediments at the top of the ravine which is the highest probability for precontact cultural resources were excavated. Future work along the top of this creek ravine would be considered a risk for cultural resources, but the highest likelihood would be where a spring or other tributary joined the creek. Often times these smaller urban creeks have been so disturbed by development that there is nothing left to see but Maddox seems to have many stretches that could have intact buried archaeological deposits along its edges.

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9.0 APPENDICES

Appendix 1: Monitoring Protocol

ERCI's management recommendations will guide the monitoring protocol during all further work associated with this project. The nature of this project provides enough flexibility to avoid archaeological resources.

Before any ground-disturbing activities begin, the archaeologist will provide sufficient information to the on-site Project representatives/superintendent regarding the laws governing archaeological material and the procedures involved should any be encountered during the Project. **The archaeologist will also provide a training to all construction workers and other craft workers associated with this project** regarding what areas of the APE have restricted access and what kinds of objects and deposits the archaeologists will be looking for. The archaeologist and the Project proponents will ensure that all people working in the APE understand who the archaeological monitor is and what their role is. Training will include an Unanticipated Discoveries Protocol training for **all** Project personnel who will be working on site. This brief training will be repeated during the Project as new construction and craft workers arrive on the Project. A dated sign-in sheet with the name and affiliation of all participants will be kept on file with ERCI and provided electronically to the Project proponents.

The archaeological monitor will have a copy of the approved monitoring plan on site at **all** times. When the archaeologist is not on site a copy of the Unanticipated Discovery Protocol will be kept on site at **all** times.

Archaeological monitoring may involve visually examining excavated soils and sidewalls of excavated areas for specific indicators of cultural resources. The monitor may need to stand close to machines and be able to examine the sediments on the ground, in the bucket, or in the back-dirt pile. The monitor may also need to request a closer look at some *in situ* sediments or profiles and will require the ability to talk directly to the machine operator and the on-site superintendent.

If needed, an additional archaeologist(s) will be called to the APE when ground-disturbing activities are being carried out in more than one area at a time.

The archaeological monitor/s will fill out daily monitoring forms with descriptions of the Project activities and take a series of before, during, and after photographs. A combination of hand sketch-mapping and GPS data will be used to document locational information. The notes, locational data and photos will be used to create a report.

Based on archival research the following deposits may be encountered during Project implementation:

- Sterile local and imported fill or sterile local alluvial or colluvial deposits sometimes with modern refuse
- Historical disturbed culture rich deposits, features or objects
- Historical intact culture-rich deposits, features or objects
- Precontact disturbed or intact culture-rich deposits, features or objects

The protocols provided below are listed according to the type of deposits that may be encountered during Project implementation.

Sterile Deposits

Sterile local and imported fills are normally sediment that is very low risk for cultural resources, characterized by uniform particle size and morphology as they have been screened in a commercial

quarry. Local sterile fill deposits are characterized by unsorted mixed sediments that match the local natural sediments, but lack any internal structure or soil development, or other indicators of being undisturbed. Intact native sterile deposits are identified by clear, predictable stratification. Sterile deposits will not be avoided or protected in any way during this project.

Historical Disturbed Culture-Rich Deposits

This type of cultural resource is a disturbed deposit that represents evidence of a historic activity older than 50 years, and could include burned sediments, metal, glass, ceramic or wood debris that is not in its original position. This includes deposits that may have been moved around by hand or machine in the last 100 years. Examples might include a buried pile of bricks that has been pushed into its current position sometime in the past, or discarded equipment that has been pushed into position and buried. These deposits lack integrity but can sometimes provide information based on the objects themselves.

If historical objects (such as a bottle with a maker's mark) are encountered in disturbed deposits, the archaeological monitor may carry out a limited amount of documentation. This could include mapping the location, photographing the object, writing a description that includes the measurements and details about the way the object was manufactured. The objective in documenting these items is to record any information that could provide some part of the story of these disturbed deposits. Examples of this would be a single bottle or can, car parts or other roadside trash. Following the documentation process, historical objects from disturbed deposits will be reburied in the trench from which they came or discarded into a waste disposal receptacle.

If a historical object is encountered in a disturbed deposit that the archaeologist believes provides significant information about the historical use of the area, the monitor may carry out more in-depth documentation of the item. For example, if a complete, labeled, glass or ceramic object is encountered, the monitor would photograph it, and record its attributes such as size, morphology and markings. If the monitoring is very busy the monitor may collect temporarily any historic object to be recorded back in the ERCI lab prior to disposal.

Significant objects from disturbed deposits that are significant, unique or previously unknown in that locality (for example: Hudson's Bay Trading Beads, bone toothbrushes, complete clay tobacco pipes) will be bagged and temporarily stored at the offices of ERCI until a suitable long-term management strategy can be developed. This process would be managed by the Lead Agency.

Historical Intact Culture-Rich Deposits

If two or more artifacts older than 50 years (i.e., historical) are found in clear archaeological association, in the same, intact matrix, this will be considered a feature. If an intact historical feature cannot be avoided, excavating machinery will be moved a safe distance away to continue other Project activities. The archaeological monitor will document the location, nature and character of the intact historical feature, photographically document it, and provide a written description and eligibility recommendation to the Lead Agency or agencies, who will consult with the DAHP for concurrence on an eligibility determination.

Intact historical deposits/features will be identified by the following characteristics:

1. A clear/distinct, mostly continuous, interface between the feature and the surrounding matrix.
2. The internal structure of the feature would be easily identified and characterized. An example of this would be a buried cellar, privy, buried boardwalk or foundation.

Additional examples of intact historical deposits/features include:

1. Old infrastructure that retains its spatial connections to a larger system, such as buried brick wastewater vaults or wood stave pipes that are part of a still-intact system.
2. A distinct residential or commercial dump that can be identified to a specific person, business or industry.

Precontact Disturbed Culture-Rich Deposits

Although the risk is low for encountering precontact deposits during the project the highest probability will be at the interface of the fill to native intact sediments either on the level surface at the top of the ravine or near the old meander of Maddox Creek down near the water. There is unlikely to be artifacts or features on the steep slope of the ravine unless they tumbled downslope either during construction of this large berm or prior to the culvert installation. If a suspected precontact culture-rich deposit is observed during monitoring and cannot be avoided, equipment must be moved away and the archaeological monitor will assess the nature of the deposits. This may take up to 2 hours. If the deposits can be avoided, then the Project work can carry on and the deposits will remain undisturbed. If the deposits cannot be avoided the on-site superintendent will ensure that equipment is moved to a safe distance away (30 feet) from the evaluation area. Work can continue elsewhere with a second archaeological monitor during the evaluation. The archaeologist will need to determine if it is disturbed or intact and collect enough information to make an eligibility determination. The archaeologist will document the location, nature and character of the deposit, photographically document it, and provide a written description and eligibility recommendation to the Lead Agency, who will consult with the DAHP and affected tribes for concurrence on an eligibility determination and the plan to move forward.

Precontact Intact Culture-Rich Deposits

Intact precontact deposits **will be avoided** on this project. If intact culture-rich deposits cannot be avoided, then a discovery/evaluation process must be developed and provided in writing to the Lead Agencies to start consultation with DAHP and the affected tribes. To be clear it is not the intent of this monitoring plan to provide a framework for disturbing intact deposits. The archaeologist will document the location, nature and character of the intact deposit, document it photographically, and provide a written description to the Lead Agencies to assist in this consultation process.

Intact precontact deposits or features will be identified by a combination of the following characteristics:

1. Include but are not limited to: fire-modified rock in a hearth feature, animal bone, concentrations of shell, lithic debitage (stone flakes from stone tool manufacture), flaked or ground-stone tools, burned earth, organic-stained sediments, charcoal, ash, non-local rocks and minerals.
2. Buried rock arrangements in association with nitrogen or carbon rich sediments indicative of human activity;
3. Artifacts in a developed soil that shows no signs of being disturbed
4. Intact features such as a hearth, camas or other root ovens for plant processing, wood arrangements related to fishing, remnants of cooking, and smoking or drying racks.
5. Preserved basketry, matting, cordage or other plant/fiber-based precontact artifacts.

The process will involve the project archaeologist providing documentation and recommendations to the project Proponent (Skagit County Public Works) to provide to the agency (Washington Department of Ecology) to engage in consultation with DAHP and the affected tribes. A Mitigative Plan will need to be developed that will be carried out prior to the Project being able to proceed in this location. All parties will need to be engaged in the construction of the plan.

In the unlikely event that human remains are inadvertently encountered at any time during the Project, the protocol outlined in the Inadvertent or Unanticipated Discoveries Plan (Appendix 1) will be followed.

Reporting

Within 30 days following Project completion, all archaeological monitoring activities will be detailed in a report and submitted to the agencies and consulting parties.

Appendix 2: Photo Log

Number	View	Description
200727CMS001	N	Culvert (N end)
200727CMS002	N	Project area- road with trail over culvert
200727CMS003	S	Project area- road with trail over culvert
200727CMS004	S	Equipment removing underbrush at 12:20pm
200727CMS005	S	Culvert
200727CMS006	SE	Equipment and steep slope
200727CMS007	SE	Equipment and steep slope
200727CMS008	S	Felled tree at 12:35pm
200727CMS009	S	Felled tree and crew with chainsaws
200727CMS010	SE	Ditch between trail and intact sediment (NE end)
200727CMS011	S	Ditch between trail and intact sediment (NE end)
200727CMS012	S	Moving felled trees at 1:10pm with equipment
200727CMS013	S	Moving felled trees and chainsaw work at 1:45pm
200727CMS014	S	Moving felled trees and chainsaw work at 1:45pm
200727CMS015	N	Felled trees at 2pm
200727CMS016	S	Felled trees at 2pm
200727CMS017	E	Refuse bottle exposed in local fill
200727CMS018	W	Refuse bottle exposed in local fill
200727CMS019	SE	Refuse bottle exposed in local fill
200727CMS020	P	Refuse bottle
200727CMS021	P	Refuse bottle
200727CMS022	P	Refuse bottle
200727CMS023	SE	Equipment and crew at 2:40pm
200727CMS024	S	Project area at 3:15pm
200727CMS025	SE	Crew with chainsaws on SE steep slope at 4:10pm
200727CMS026	P	Cement siding
200727CMS027	P	Cement siding
200727CMS028	P	Garbage pile in exposed sediment from roots
200727CMS029	P	Fence stake
200727CMS030	P	Fence stake
200727CMS031	SW	Project area at 4:45pm
200727CMS032	P	Concrete pipe pieces
200727CMS033	P	Concrete pipe pieces
200727CMS034	P	Concrete pipe pieces
200727CMS035	P	Concrete pipe pieces
200727CMS036	P	Metal box and charcoal
200727CMS037	P	Metal box and charcoal
200727CMS038	P	Rubber hose
200727CMS039	W	Garbage heap in exposed sediment

Number	View	Description
200727CMS040	S	Project area at 5pm
200727CMS041	W	Culvert
200727CMS042	W	Alluvium around culvert
200727CMS043	P	Metal box
200727CMS044	P	Metal box
200727CMS045	P	Concrete pipes
200727CMS046	P	Concrete pipes
200727CMS047	P	Asphalt
200727CMS048	P	Metal pipe
200727CMS049	P	Asphalt
200727CMS050	P	Asphalt
200727CMS051	P	Metal pipe
200727CMS052	P	Beer can from heap
200727CMS053	P	Beer can from heap
200727CMS054	P	Beer can from heap
200728CMS001	W	Trailhead and equipment
200728CMS002	N	Start of day
200728CMS003	N	Tire tracks in flat grassy area
200728CMS004	N	Moving exposed dirt from felling trees yesterday
200728CMS005	NW	Felling trees with excavator
200728CMS006	SE	Fence stake in exposed dirt on trail
200728CMS007	P	Jacket pieces and zipper in exposed dirt on trail
200728CMS008	P	Jacket pieces and zipper in exposed dirt on trail
200728CMS009	NW	Felling trees
200728CMS010	NW	Root ball and exposed dirt in SW area
200728CMS011	W	Scraping dirt off root ball
200728CMS012	NW	Project area at 8am
200728CMS013	NW	Shaking and scraping dirt root ball
200728CMS014	NW	Shaking and scraping dirt root ball
200728CMS015	NW	Disturbance from felling trees in sw corner
200728CMS016	W	Disturbance from felling trees in sw corner
200728CMS017	N	Disturbance from felling trees in sw corner
200728CMS018	NW	SW area at 8:30am
200728CMS019	E	M2 (Glacial) in sidewall of intact steep slope in E side of trail
200728CMS020	P	Cobbles near concrete pipes (part of fill)
200728CMS021	SW	Project area
200728CMS022	W	Project area
200728CMS023	SE	Project area
200728CMS024	E	Project area
200728CMS025	N	Felling maple trees on N side
200728CMS026	P	Dark brown clay sediment
200728CMS027	E	Disturbed sidewall in E steep slope from tree pile

Number	View	Description
200728CMS028	E	Disturbed sidewall in E steep slope from tree pile
200728CMS029	N	Felling trees at 10am- after felled maple trees
200728CMS030	N	Felling trees at 10am- after felled maple trees
200728CMS031	S	Project at 10am
200728CMS032	P	Corroded metal wire
200728CMS033	P	Corroded metal wire
200728CMS034	E	Corroded metal wire in side wall
200728CMS035	E	Corroded metal wire In side wall
200728CMS036	E	Corroded metal wire in side wall
200728CMS037	SE	Root in N side of trail
200728CMS038	P	Corroded metal wire
200728CMS039	P	Corroded metal wire
200728CMS040	P	Corroded metal wire
200728CMS041	P	Corroded metal wire
200728CMS042	W	NW area in cedars
200728CMS043	NW	Decomposing cedar stump
200728CMS044	N	N Tree pile
200728CMS045	N	N tree pile
200728CMS046	P	Chunk of asphalt
200728CMS047	P	Chunk of concrete
200728CMS048	P	Chunk of concrete
200728CMS049	P	Concrete pipes
200728CMS050	P	Concrete pipes
200728CMS051	P	Concrete pipes
200728CMS052	P	Concrete pipes
200728CMS053	P	Other items exposed with concrete pipes (in the fill)
200728CMS054	P	Close up of wire
200728CMS055	P	Close up of red coolant can
200728CMS056	P	Close up of metal band
200728CMS057	P	Close up of metal band
200728CMS058	P	Close up of metal band
200728CMS059	P	Close up of metal band
200728CMS060	NW	Tree pile in flat grassy area
200728CMS061	N	Project area at 1:20pm
200728CMS062	SE	Dump truck
200728CMS063	SE	Dump truck
200728CMS064	W	House at top of W slope with trash along slope
200728CMS065	W	Trash from house on slope
200728CMS066	W	Bonnie Rae park sign
200728CMS067	W	Loading trees in dump truck
200728CMS068	N	More chunks of asphalt
200728CMS069	P	Light gray sand sediment (glacial?) on SE steep slope

Number	View	Description
200728CMS070	SE	Concrete (pipe fragment)
200728CMS071	P	Concrete (pipe fragment)
200728CMS072	P	Concrete (pipe fragment)
200728CMS073	P	30 gallon barrel
200728CMS074	P	30 gallon barrel
200728CMS075	P	30 gallon barrel
200728CMS076	P	30 gallon barrel
200728CMS077	P	Metal coil
200728CMS078	P	Metal coil
200728CMS079	P	30 gallon barrel
200728CMS080	P	30 gallon barrel
200728CMS081	SW	Barrell, garbage can, plastic bucket
200728CMS082	SW	Barrell, garbage can, plastic bucket
200728CMS083	SW	Barrell, garbage can, plastic bucket
200728CMS084	P	Amber bottle
200728CMS085	P	Amber bottle
200728CMS086	P	Amber bottle
200728CMS087	P	Amber bottle
200728CMS088	P	Amber bottle
200728CMS089	P	Amber bottle
200728CMS090	P	Amber bottle
200728CMS091	P	Amber bottle
200728CMS092	P	Amber bottle
200728CMS093	P	Amber bottle
200728CMS094	P	Amber bottle
200728CMS095	P	Amber bottle
200728CMS096	P	Amber bottle
200728CMS097	P	Amber bottle
200728CMS098	P	Amber bottle
200728CMS099	P	Amber bottle
200728CMS100	P	Amber bottle
200728CMS101	P	Amber bottle
200728CMS102	P	Amber bottle
200728CMS103	P	Amber bottle
200728CMS104	P	Amber bottle
200728CMS105	N	Project at 5pm
200729CMS001	N	Project area start of day
200729CMS002	P	Chunk of concrete
200729CMS003	P	Chunk of concrete
200729CMS004	W	Loading trees into semi truck at 7:45am
200729CMS005	W	Loading trees into semi truck at 7:45am
200729CMS006	NW	Tree piles in flat, grassy area

Number	View	Description
200729CMS007	NW	SW end of culvert and W edge of trail
200729CMS008	P	Metal loops with wood inside
200729CMS009	P	Metal loops with wood inside
200729CMS010	P	Partially burned wood piece inside metal loops
200729CMS011	P	Metal loops
200729CMS012	P	Metal loops
200729CMS013	P	Metal loops
200729CMS014	P	Metal Loops
200729CMS015	P	Metal loops
200729CMS016	P	7up can in metal loops with scale
200729CMS017	P	7up can in metal loops with scale
200729CMS018	P	7up can in metal loops with scale
200729CMS019	P	Piece of metal loop with scale
200729CMS020	P	Piece of metal loop with scale
200729CMS021	P	Piece of metal loop with scale
200729CMS022	P	Piece of metal loop with scale
200729CMS023	P	Piece of metal loop with scale
200729CMS024	P	Piece of metal loop with scale
200729CMS025	P	Metal loops
200729CMS026	P	Metal loops
200729CMS027	SE	Burned tree
200729CMS028	SE	Burned tree
200729CMS029	P	Glass medicine bottle
200729CMS030	P	Glass medicine bottle
200729CMS031	P	Glass medicine bottle
200729CMS032	P	Glass medicine bottle
200729CMS033	P	Glass medicine bottle
200729CMS034	P	Glass medicine bottle
200729CMS035	P	Clear glass jar
200729CMS036	P	Clear glass jar
200729CMS037	P	Clear glass jar
200729CMS038	P	Clear glass jar
200729CMS039	P	Clear glass jar
200729CMS040	P	Clear glass jar
200729CMS041	N	Project area
200729CMS042	N	Deer
200729CMS043	S	Area where metal loops, bottles and jars were found
200729CMS044	SW	Area where metal loops, bottles and jars were found
200729CMS045	-	Delete
200729CMS046	P	Clear glass jar (cleaned better)
200729CMS047	P	Clear glass jar (cleaned better)
200729CMS048	P	Clear glass jar (cleaned better)

Number	View	Description
200729CMS049	P	Clear glass jar (cleaned)
200729CMS050	P	Clear glass jar (cleaned)
200729CMS051	P	Clear glass jar (cleaned)
200729CMS052	P	Clear glass jar (cleaned)
200729CMS053	P	Clear glass jar (cleaned)
200729CMS054	P	Medicine bottle in sunlight for detail
200729CMS055	P	Medicine bottle in sunlight for detail
200729CMS056	P	Medicine bottle in sunlight for detail
200729CMS057	NW	WC crew doing GPS work at 1:30pm in SW
200729CMS058	S	WC crew loading the tree piles on the trail
200729CMS059	SE	Cedar stump removal on E slops
200729CMS060	SE	Cedar stump removal on E slops
200729CMS061	S	Cedar stump root ball
200729CMS062	SE	Sediment under cedar stump
200729CMS063	P	Surface trash that fell down after cedar stump removal
200729CMS064	SE	Sediment on E steep slope
200729CMS065	-	Delete
200729CMS066	-	Delete
200729CMS067	-	Delete
200729CMS068	-	Delete
200729CMS069	-	Delete
200729CMS070	-	Delete
200729CMS071	-	Delete
200729CMS072	N	Shaking out cedar stump
200729CMS073	W	Dump truck tire tracks in fill and last tree pile
200729CMS074	E	Sediment in E steep slope
200730CMS001	P	Project and date info
200730CMS002	N	Project area start of day
200730CMS003	NE	Maddox creek (NE side of culvert)
200730CMS004	W	Loading trees in flat, grassy area at 8:30am
200730CMS005	SW	Tree piles, trucks, equipment on flat grassy area at 10:30am
200730CMS006	SW	Truck with crushed rock, crew putting up fence
200730CMS007	SW	Pouring crushed rock for truck entrance
200730CMS008	W	Pouring crushed rock for truck entrance
200730CMS009	E	Concrete pipes
200730CMS010	E	Biggest pipe
200730CMS011	E	Biggest pipe
200730CMS012	E	Smallest pipe
200730CMS013	E	Concrete pipe
200730CMS014	N	Concrete pipe
200730CMS015	NW	Concrete pipe
200730CMS016	P	Concrete pipes

Number	View	Description
200730CMS017	P	Concrete pipes
200730CMS018	P	Concrete pipes
200730CMS019	P	Close up of nut and bolt
200730CMS020	SW	Concrete pipes
200730CMS021	SW	Concrete pipes
200730CMS022	E	Crew doing GPS work at 2:15pm
200730CMS023	W	Dump truck pressing crushed rock into grass
200730CMS024	W	Digging in N ditch at 3:15pm
200730CMS025	S	Digging in N ditch at 3:15pm
200730CMS026	SW	Digging in N ditch at 3:15pm
200730CMS027	SW	Ditch at 3:25pm
200730CMS028	P	Gray clay with subangular gravels
200730CMS029	N	Chunks of concrete
200730CMS030	P	Chunks of concrete
200730CMS031	P	Chunks of concrete
200730CMS032	NW	Location of chunks of concrete
200730CMS033	P	Chunks of concrete
200730CMS034	S	N ditch at 4:15pm
200730CMS035	E	Root burn in N ditch
200730CMS036	E	N ditch profile with scale
200730CMS037	S	Loading dirt from N ditch at 5pm
200730CMS038	P	Crushed piece of metal from N ditch
200730CMS039	P	Crushed piece of metal from N ditch
200730CMS040	P	Crushed piece of metal from N ditch
200731CMS001	W	Start of day flat grassy area
200731CMS002	N	Start of day culvert trail in N ditch
200731CMS003	P	A&W root beer can
200731CMS004	P	A&W root beer can
200731CMS005	P	A&W root beer can
200731CMS006	P	A&W root beer can
200731CMS007	P	A&W root beer can
200731CMS008	SW	Filling N ditch with crushed rock at 7:40am
200731CMS009	S	Touching up edges and sides of west ditch
200731CMS010	W	Crushed rock in N ditch
200731CMS011	P	Notes from previous days
200731CMS012	P	Notes from previous days
200731CMS013	P	Notes from previous days
200731CMS014	P	Notes from previous days
200731CMS015	P	Notes from previous days
200731CMS016	P	Notes from previous days
200731CMS017	P	Notes from previous days
200731CMS018	P	Notes from previous days

Number	View	Description
200731CMS019	P	Notes from previous days
200731CMS020	P	Notes from previous days
200731CMS021	P	Notes from previous days
200731CMS022	P	Notes from previous days
200731CMS023	P	Work at 8:50am
200731CMS024	P	Flattening N side of trail
200731CMS025	P	Notes from previous days
200731CMS026	P	Notes from previous days
200731CMS027	P	Notes from previous days
200731CMS028	P	Notes from previous days
200731CMS029	P	Notes from previous days
200731CMS030	P	Notes from previous days
200731CMS031	P	Notes from previous days
200731CMS032	P	Notes from previous days
200731CMS033	W	Concrete block in stockpile
200731CMS034	W	Concrete block in stockpile
200731CMS035	W	Concrete block in stockpile
200731CMS036	NW	Concrete block in stockpile
200731CMS037	P	Concrete block in stockpile
200731CMS038	P	Concrete block in stockpile
200731CMS039	P	Concrete block in stockpile
200731CMS040	P	Concrete block in stockpile
200731CMS041	P	Concrete block in stockpile
200731CMS042	S	Culvert excavation (N side near N ditch)
200731CMS043	SE	Culvert excavation (N side near N ditch)
200731CMS044	E	Culvert excavation (N side near N ditch)
200731CMS045	P	Piece of amber glass
200731CMS046	P	Piece of amber glass
200731CMS047	P	Piece of amber glass
200731CMS048	P	Plastic
200731CMS049	N	N Ditch and culvert excavation in N area
200731CMS050	P	Black plastic tube/pipe
200731CMS051	P	Black plastic tube/pipe
200731CMS052	SW	Extending N ditch @ 11am
200731CMS053	NW	N side culvert excavation sediment profile
200731CMS054	NW	N side culvert excavation sediment profile with scale
200731CMS055	E	Glob of clay
200731CMS056	E	Glob of clay
200731CMS057	NW	Glob of clay
200731CMS058	NE	Culvert excavation
200731CMS059	P	Clay sample
200731CMS060	P	Clay sample

Number	View	Description
200731CMS061	P	Clay sample
200731CMS062	P	Clay sample
200731CMS063	S	Clay sample at 11:45am
200731CMS064	-	Delete
200731CMS065	S	Excavation at noon shows dark gray clay
200731CMS066	P	Excavation at noon shows dark gray clay
200731CMS067	P	Excavation at noon shows dark gray clay
200731CMS068	P	Crushed metal from S of N ditch
200731CMS069	P	Crushed metal from S of N ditch
200731CMS070	P	Crushed metal from S of N ditch
200731CMS071	P	Crushed metal from S of N ditch
200731CMS072	P	Crushed metal from S of N ditch
200731CMS073	P	Crushed metal from S of N ditch unfolded
200731CMS074	P	Crushed metal from S of N ditch unfolded
200731CMS075	SE	Project at 1:40pm
200731CMS076	N	N side profile @ 2pm
200731CMS077	N	N side profile @ 2pm
200731CMS078	NW	Clay coloration in profile
200731CMS079	NW	Clay coloration in profile
200731CMS080	NW	Clay coloration in profile
200731CMS081	NW	Clay coloration in profile
200731CMS082	NW	Clay coloration in profile
200731CMS083	NW	Clay coloration in profile
200731CMS084	NW	Clay coloration in profile
200731CMS085	P	Concrete from W side of trail
200731CMS086	P	Concrete from W side of trail
200731CMS087	P	Concrete from W side of trail
200731CMS088	N	Excavator flattening stockpile
200731CMS089	P	Piece of rubber mat
200731CMS090	N	Project at 2:50pm
200731CMS091	S	Terraces in culvert excavation
200731CMS092	E	Asphalt in E edge
200731CMS093	E	Asphalt in E edge
200731CMS094	S	Project at 4pm taken from 2nd terrace
200731CMS095	N	Profile of 2nd terrace on N end of trail- Shows clay 0-100cm
200731CMS096	W	Profile of center above culvert shows 0-70cm silty sand 70-85cm clay
200731CMS097	SW	Digging where profile (for photo 96) was
200731CMS098	N	End of day
200803CMS001	P	Day info
200803CMS002	SW	Excavator and Stockpile
200803CMS003	N	Start of day

Number	View	Description
200803CMS004	SW	Dump truck trace at trailhead
200803CMS005	S	Dump truck trace at trailhead
200803CMS006	W	Stockpile at 8:30am
200803CMS007	E	Cleaning sidewall
200803CMS008	S	Cleaning sidewall
200803CMS009	S	Extending ditch at 9:30am
200803CMS010	S	Two excavators
200803CMS011	W	N ditch profile with scale
200803CMS012	SE	Cleaning edge SE side
200803CMS013	NW	Cleaning edge SE side
200803CMS014	S	Cleaning edge SW side at 11:15am
200803CMS015	SE	Cleaning edge SW side at 11:15am
200803CMS016	NE	Cleaning edge SW side at 11:15am
200803CMS017	P	Cable
200803CMS018	P	Cable
200803CMS019	P	Cable
200803CMS020	S	SW side at noon
200803CMS021	SE	Natural charcoal in SW side
200803CMS022	SE	Natural charcoal in SW side
200803CMS023	SE	Natural charcoal in sw side overview
200803CMS024	SE	Burned root above charcoal
200803CMS025	P	Pieces of charcoal
200803CMS026	P	Pieces of charcoal with scale
200803CMS027	P	Pieces of charcoal with scale
200803CMS028	P	Pieces of charcoal with scale
200803CMS029	P	Pieces of charcoal with scale
200803CMS030	SE	SW side charcoal and M4
200803CMS031	E	SW side charcoal and M4
200803CMS032	P	Charcoal with scale
200803CMS033	P	Charcoal with scale
200803CMS034	P	Charcoal with scale
200803CMS035	P	Charcoal with scale
200803CMS036	P	Charcoal with scale
200803CMS037	P	Charcoal with scale
200803CMS038	P	Charcoal with scale
200803CMS039	P	Charcoal with scale
200803CMS040	P	Log with burn marks
200803CMS041	P	Log with burn marks
200803CMS042	PP	Log with burn marks
200803CMS043	P	Log with burn marks
200803CMS044	P	Charcoal
200803CMS045	P	Charcoal

Number	View	Description
200803CMS046	P	Charcoal
200803CMS047	S	Burned tree SW side
200803CMS048	S	Burned tree SW side
200803CMS049	P	Charcoal from burned tree
200803CMS050	P	Charcoal from burned tree
200803CMS051	P	Charcoal from burned tree
200803CMS052	SW	SW Steep slope at 3:15am
200803CMS053	S	SW Steep slope at 3:15am
200803CMS054	S	SE Steep slope
200803CMS055	S	SE Steep slope
200803CMS056	N	N Ditch
200804CMS001	P	Day info
200804CMS002	N	Start of day
200804CMS003	E	Straw material
200804CMS004	N	Pouring straw on N slope
200804CMS005	S	N Ditch at 9:40am
200804CMS006	S	N Ditch at 10am
200804CMS007	W	Profile N ditch
200804CMS008	P	Brick frag from N ditch
200804CMS009	P	Brick frag from N ditch
200804CMS010	P	Brick frag from N ditch
200804CMS011	P	Brick frag from N ditch
200804CMS012	P	Brick frag from N ditch
200804CMS013	-	Delete
200804CMS014	P	Whole brick from N ditch
200804CMS015	P	Whole brick from N ditch
200804CMS016	P	Whole brick from N ditch
200804CMS017	P	Whole brick from N ditch
200804CMS018	P	Whole brick from N ditch
200804CMS019	P	Whole brick from N ditch
200804CMS020	P	Whole brick from N ditch
200804CMS021	SW	N Ditch at noon
200804CMS022	W	Metal pipe in N Ditch
200804CMS023	SW	Metal pipe in N Ditch
200804CMS024	P	Metal pipe
200804CMS025	P	Metal pipe
200804CMS026	W	Asphalt in N ditch profile
200804CMS027	W	Asphalt in N ditch profile
200804CMS028	W	Asphalt in N ditch profile
200804CMS029	W	Asphalt in N ditch profile
200804CMS030	S	Big excavator N ditch at 12:30pm
200804CMS031	P	Branch and grasses from N ditch

Number	View	Description
200804CMS032	P	Branch and grasses from N ditch
200804CMS033	P	Branch and grasses from N ditch
200804CMS034	S	Where can and new damp sediment are N ditch at 12:45am
200804CMS035	P	Orange enco can
200804CMS036	P	Orange enco can
200804CMS037	P	Orange enco can
200804CMS038	P	Orange enco can
200804CMS039	P	Orange enco can
200804CMS040	P	Orange enco can
200804CMS041	S	N ditch at 2pm
200804CMS042	N	N ditch at 2pm
200804CMS043	P	Horse shoe from N ditch
200804CMS044	P	Horseshoe from N ditch
200804CMS045	P	Horseshoe from N ditch
200804CMS046	P	Horseshoe from N ditch
200804CMS047	P	Horseshoe from N ditch
200804CMS048	P	Piece of clay pipe from N ditch
200804CMS049	P	Piece of clay pipe from N ditch
200804CMS050	P	Piece of clay pipe from N ditch
200804CMS051	P	Piece of clay pipe from N ditch
200804CMS052	P	Piece of clay pipe from N ditch
200804CMS053	P	Piece of clay pipe from N ditch
200804CMS054	SW	N Ditch at 3:20pm
200804CMS055	P	More horseshoe photos- side
200804CMS056	P	More horseshoe photos- side
200804CMS057	P	More horseshoe photos- side
200804CMS058	P	Clay pipe frag #2
200804CMS059	P	Clay pipe frag #2
200804CMS060	P	Clay pipe frag #2
200804CMS061	P	Clay pipe frag #2
200804CMS062	SE	Stockpile on trail from N ditch excavation
200804CMS063	S	Project at 3:30pm
200804CMS064	P	Brick 1
200804CMS065	P	Brick 1
200804CMS066	P	Brick 1
200804CMS067	P	Brick 1
200804CMS068	P	Brick 1
200804CMS069	P	Brick 1
200804CMS070	P	Brick 2
200804CMS071	P	Brick 2
200804CMS072	P	Brick 2
200804CMS073	P	Brick 2

Number	View	Description
200804CMS074	P	Brick 2
200804CMS075	P	Brick 2
200804CMS076	W	Ditch profile
200804CMS077	W	Ditch profile
200804CMS078	NW	End of ditch extension at west edge of trail
200804CMS079	N	End of day at 6pm
200805CMS001	P	Day info
200805CMS002	SE	Loading stockpile at 8am
200805CMS003	P	Metal rod from stockpile
200805CMS004	P	Metal rod from stockpile
200805CMS005	P	Metal rod from stockpile
200805CMS006	P	Metal rod from stockpile
200805CMS007	P	Metal rod from stockpile
200805CMS008	E	Felling trees
200805CMS009	SE	Excavating trail E edge
200805CMS010	S	Excavating trail E edge at noon
200805CMS011	S	Excavating trail E edge at 1pm
200805CMS012	S	Excavating trail E edge at 2pm
200805CMS013	E	SW steep slope profile M1 and M4
200805CMS014	E	SW steep slope profile M1 and M5
200805CMS015	E	SW steep slope profile M1 and M6
200805CMS016	P	Piece of clay pipe
200805CMS017	P	Piece of clay pipe
200805CMS018	P	Piece of clay pipe
200805CMS019	SE	Excavation at 4pm
200805CMS020	SW	Loading stockpile near SW steep slope
200805CMS021	S	Cleaning/ finishing SW steep slope at 5:15pm
200805CMS022	N	Digging N side slope at 5:30pm
200806CMS001	N	Start of day
200806CMS002	W	S slope W edge
200806CMS003	SE	S slope W edge
200806CMS004	SE	S slope W edge
200806CMS005	SE	Edge of fill- line between fill and intact
200806CMS006	SE	Edge of fill- line between fill and intact
200806CMS007	SE	Edge of fill- line between fill and intact
200806CMS008	NW	Edge of fill- line between fill and intact
200806CMS009	N	Dump truck tire tracks
200806CMS010	SW	Dump truck tire tracks
200806CMS011	W	Dump truck tire tracks
200806CMS012	W	Dump truck tire tracks
200806CMS013	SW	Flattened trail with more M1 on top
200806CMS014	NE	Start digging on SE slope at about 10:15am

Number	View	Description
200806CMS015	SW	Dump truck on flattened trail
200806CMS016	NE	At SE slope
200806CMS017	NE	At SE slope
200806CMS018	SE	SE slope profile
200806CMS019	SE	SE slope profile at E edge of trail
200806CMS020	S	Asphalt in fill- SE slope
200806CMS021	S	SE slope at 11am
200806CMS022	S	SE slope at 11:45am
200810CMS001	P	Day info
200810CMS002	N	Project at 8am
200810CMS003	NE	Project at 8am
200810CMS004	SW	Project at 8am
200810CMS005	NW	Project at 8am
200810CMS006	NE	Project
200810CMS007	SW	Project
200810CMS008	N	Project at 1pm
200810CMS009	SE	Project at 1pm SE slope
200810CMS010	E	N side
200810CMS011	E	SE slope
200810CMS012	DELETE	DELETE
200810CMS013	E	SE slope
200810CMS014	E	SE slope shows M2
200810CMS015	E	SE slope
200810CMS016	SW	SE slope at about 1:30pm
200810CMS017	SE	SE slope profile
200810CMS018	SE	SE slope profile
200810CMS019	SE	SE slope profile (vertical photo)
200810CMS020	SW	SE slope
200810CMS021	S	SE slope
200810CMS022	SE	Felled tree on SE slope
200810CMS023	S	Progress on SE slope at 1:45pm and smoothing trail
200810CMS024	N	Project after dug SE slope
200811CMS001	P	Day info
200811CMS002	N	Start of day
200811CMS003	S	Digging M1 and boulders
200811CMS004	S	Digging M1 and boulders
200811CMS005	S	Digging M1 and boulders
200811CMS006	S	Project
200811CMS007	N	Project at 4:30pm
200811CMS008	E	Flattening trailhead
200811CMS009	E	E area
200811CMS010	SE	SE slope

Number	View	Description
200811CMS011	SE	NE end of culvert
200811CMS012	W	NE end of culvert and project at about 5pm
200812CMS001	P	Day info
200812CMS002	W	Start of day
200812CMS003	N	N slope
200812CMS004	NE	NE end of culvert and SE slope
200812CMS005	S	Digging on W side of drainage ditch, excavator on pile of fill
200812CMS006	N	Project at 3:30pm
200812CMS007	NW	Small excavator cleaning slope/ digging SW area, taken from trailhead- top of SW slope
200812CMS008	SW	Small excavator and SW slope
200812CMS009	S	Project
200812CMS010	S	Small excavator digging in M2 fill
200812CMS011	P	Metal pipe in M2
200812CMS012	P	Metal pipe in M2
200812CMS013	P	Metal pipe in M2 with scale
200812CMS014	P	Metal pipe in M2 with scale
200812CMS015	P	Metal pipe in M2 with scale
200812CMS016	P	Metal pipe in M2 with scale
200812CMS017	SE	SW slope at 4:30pm
200812CMS018	E	Project at 4:30pm
200812CMS019	SW	SW end of culvert
200812CMS020	SE	Digging SW slope- extending it along trail
200812CMS021	S	End of day
200812CMS022	P	Yellow plastic hose in M2
200812CMS023	P	Yellow plastic hose in M2
200812CMS024	N	End of day
200813CMS001	N	Start of day
200813CMS002	SW	Start of day
200813CMS003	SE	SE slope
200813CMS004	SW	Digging end of ditch
200813CMS005	SW	Digging end of ditch
200813CMS006	SW	Digging end of ditch with smaller excavator
200813CMS007	SW	Digging end of ditch with smaller excavator
200813CMS008	W	Digging end of ditch with smaller excavator
200813CMS009	W	Ditch profile
200813CMS010	E	Slope along trail (continuation of SW slope)
200813CMS011	SW	End of ditch where meets with intact slope
200813CMS012	W	End of ditch where meets with intact slope
200813CMS013	NE	Project at 9am
200813CMS014	N	Project at 9am
200813CMS015	N	W edge of ditch and intact slope

Number	View	Description
200813CMS016	NW	SW end of culvert
200813CMS017	E	Slope along trail (continuation of SW slope)
200813CMS018	E	Slope along trail (continuation of SW slope)
200813CMS019	E	Slope along trail (continuation of SW slope)
200813CMS020	N	Ditch
200813CMS021	NW	Ditch
200813CMS022	P	Color variation in M2- center of trail
200813CMS023	E	Color variation in M2- center of trail
200813CMS024	NW	Flat, grassy area
200813CMS025	N	Flat, grassy area
200813CMS026	N	Project at 11:30am
200813CMS027	N	Project at noon
200813CMS028	N	Project at 1:30pm
200813CMS029	SW	Project at 1:30pm
200813CMS030	E	N slope
200813CMS031	NE	E edge of N slope and NE end of culvert
200813CMS032	SW	E edge of SE slope and NE end of culvert
200813CMS033	SW	Digging at SE slope
200813CMS034	SE	Digging at SE slope
200813CMS035	SE	Digging at SE slope
200813CMS036	S	Digging at SE slope
200813CMS037	P	Metal tank from SE slope
200813CMS038	P	Metal tank from SE slope
200813CMS039	P	Metal tank from SE slope
200813CMS040	P	Metal tank from SE slope
200813CMS041	SW	SE slope at 3:30pm
200813CMS042	S	SE slope at 3:30pm
200813CMS043	SW	SE slope at 4pm
200813CMS044	S	End of ditch at end of day
200813CMS045	N	Project at end of day
200817CMS001	N	Start of day
200817CMS002	E	Start of day
200817CMS003	E	Filling in part of SE slope
200817CMS004	SW	SW end of culvert gone
200817CMS005	P	Metal can
200817CMS006	P	Metal can
200817CMS007	P	Metal can
200817CMS008	SE	SE slope after filled in
200817CMS009	SW	Part of culvert at base of SE slope
200817CMS010	E	NE end of culvert gone
200817CMS011	W	NE end of culvert gone
200817CMS012	SW	Culvert at base of SE slope- shows fills and possible intact

Number	View	Description
200817CMS013	N	Project at 9:15am
200817CMS014	E	Buried GPS line
200817CMS015	W	Buried GPS line
200817CMS016	SW	Trailhead
200817CMS017	W	Trailhead
200817CMS018	NW	Project at 11am
200817CMS019	SW	Checking slope in SE slope with excavator
200817CMS020	SW	Digging fill
200817CMS021	SW	Shows culvert
200817CMS022	SW	Fixing SE slope
200817CMS023	W	Fixing SE slope
200817CMS024	NE	Shows culvert
200817CMS025	SE	Slope profile (SW slope)
200817CMS026	SW	Finishing ditch
200817CMS027	SW	Finishing ditch
200817CMS028	N	End of ditch
200817CMS029	NE	Project at 12:30pm
200817CMS030	N	End of ditch, shows cement pipe
200817CMS031	E	Shows culvert
200817CMS032	S	Fixing trail slope/ S slope
200817CMS033	W	End of ditch profile
200817CMS034	NE	Culvert
200817CMS035	SE	Fixing trail slope/ S slope
200817CMS036	SE	Fixing trail slope/ S slope at 2pm
200817CMS037	E	Laying straw on SE slope
200817CMS038	P	Wood pipe with metal bands
200817CMS039	P	Wood pipe with metal bands
200817CMS040	P	Wood pipe with metal bands
200817CMS041	P	Wood pipe with metal bands
200817CMS042	SW	Digging near end of ditch
200817CMS043	SW	Exposing natural creek bed
200817CMS044	P	Clear glass bottle with "621 WINE NW"
200817CMS045	P	Clear glass bottle with "621 WINE NW"
200817CMS046	P	Clear glass bottle with "621 WINE NW"
200817CMS047	P	Clear glass bottle with "621 WINE NW"
200817CMS048	P	Clear glass bottle with "621 WINE NW"
200817CMS049	P	Clear glass bottle with "621 WINE NW"
200817CMS050	P	Clear glass bottle with "621 WINE NW"
200817CMS051	P	Clear glass bottle with "621 WINE NW"
200817CMS052	P	Clear glass bottle with "621 WINE NW"
200817CMS053	P	Clear glass bottle with "621 WINE NW"
200817CMS054	P	Clear glass bottle with "621 WINE NW"

Number	View	Description
200817CMS055	P	Clear glass bottle with "621 WINE NW"
200817CMS056	P	Clear glass bottle with "621 WINE NW"
200817CMS057	P	Clear glass bottle with "621 WINE NW"
200817CMS058	P	Clear glass bottle with "621 WINE NW"
200817CMS059	P	Clear glass bottle with "621 WINE NW"
200817CMS060	N	Project at 4:30pm
200817CMS061	N	Project at 4:30pm
200818CMS001	P	Day info
200818CMS002	N	Start of day
200818CMS003	S	Digging on S slope above culvert
200818CMS004	S	Removing section of culvert
200818CMS005	SW	Digging fill above culvert
200818CMS006	SW	Removing last section of culvert
200818CMS007	W	Culvert removed
200818CMS008	SW	Culvert removed
200818CMS009	SW	Culvert removed
200818CMS010	SW	Jackhammering slope
200818CMS011	W	Culvert removed and jackhammering
200818CMS012	S	Culvert removed
200818CMS013	E	Culvert removed- shows lighter brown color M2
200818CMS014	E	Project at 10am
200818CMS015	W	Digging at upstream/ E edge
200818CMS016	NW	Creating trail in N slope
200818CMS017	W	Digging at upstream/ E edge at 11 am
200818CMS018	SE	Edge of creek bed
200818CMS019	S	Digging at edge of creek bed
200818CMS020	W	Exposing creek bed in upstream/ E edge area
200818CMS021	W	Exposing creek bed in upstream/ E edge area
200818CMS022	W	Project at noon
200818CMS023	N	Project at 1pm
200818CMS024	P	Clear glass bottle- Illinois Glass Co.
200818CMS025	P	Clear glass bottle- Illinois Glass Co.
200818CMS026	P	Clear glass bottle- Illinois Glass Co.
200818CMS027	P	Clear glass bottle- Illinois Glass Co.
200818CMS028	P	Clear glass bottle- Illinois Glass Co.
200818CMS029	P	Clear glass bottle- Illinois Glass Co.
200818CMS030	P	Clear glass bottle- Illinois Glass Co.
200818CMS031	P	Clear glass bottle- Illinois Glass Co.
200818CMS032	P	Clear glass bottle- Illinois Glass Co. but with twigs removed from inside
200818CMS033	P	Clear glass bottle- Illinois Glass Co. but with twigs removed from inside

Number	View	Description
200818CMS034	P	Clear glass bottle- Illinois Glass Co. but with twigs removed from inside
200818CMS035	P	Clear glass bottle- Illinois Glass Co. but with twigs removed from inside
200818CMS036	P	Clear glass bottle- Illinois Glass Co. but with twigs removed from inside
200818CMS037	SW	Project at 3pm
200818CMS038	N	Wood debris
200818CMS039	N	Wood debris
200818CMS040	N	Wood debris
200818CMS041	NW	Location of wood debris
200818CMS042	N	Wood debris
200818CMS043	N	Wood debris
200818CMS044	N	Charcoal (part of M2 fill)
200818CMS045	N	Charcoal (part of M2 fill)
200818CMS046	N	Charcoal (part of M2 fill)
200818CMS047	N	Charcoal (part of M2 fill)
200818CMS048	N	Charcoal (part of M2 fill)
200818CMS049	N	Charcoal (part of M2 fill)
200818CMS050	SW	Project at 4pm
200818CMS051	E	Project at 4:15pm
200818CMS052	SW	Project at 4:15pm
200818CMS053	N	End of day
200819CMS001	P	Day info
200819CMS002	N	Start of day
200819CMS003	E	Start of day
200819CMS004	SE	Start of day
200819CMS005	E	Finishing N slope at upstream end
200819CMS006	E	Finishing N slope at upstream end
200819CMS007	W	Finishing N slope at upstream end
200819CMS008	NW	Digging in fill with wood debris
200819CMS009	N	Charcoal in fill
200819CMS010	SW	Finishing SE slope at upstream end
200819CMS011	SW	Finishing SE slope at upstream end at 9am
200819CMS012	NW	Widening trail in N slope
200819CMS013	W	Widening trail in N slope
200819CMS014	S	Work on SE slope at 10:40am
200819CMS015	S	M2 over M3 in SE slope profile
200819CMS016	S	M2 over M3 in SE slope profile with scale and showing more slope
200819CMS017	N	City? People on N slope trail
200819CMS018	W	Project at about 11am
200819CMS019	NE	City? People scoping area for path to trail on N slope
200819CMS020	W	Exposing creek bed near center of creek

Number	View	Description
200819CMS021	E	Project at 11:30am
200819CMS022	NW	Working on slopes in downstream area
200819CMS023	SW	Working on slopes in downstream area
200819CMS024	S	SW slope - excavated to creek bed covered in straw
200819CMS025	NE	Project at 1:15 pm
200819CMS026	E	Upstream E area
200819CMS027	N	Trailhead and stockpile
200819CMS028	E	Flat, grassy area now dirt- Little Mountain in background
200819CMS029	N	Project at about 3:45pm- digging center of creek
200819CMS030	N	Project at about 4:15pm- digging center of creek
200819CMS031	SE	Project at about 4:45pm- digging center of creek
200819CMS032	N	End of day
200820CMS001	P	Day info
200820CMS002	N	Start of day about 7am
200820CMS003	NW	Loading stockpile in flat, grassy area
200820CMS004	N	Project at 11:30am
200820CMS005	E	Trail moved near trailhead
200820CMS006	NE	Trail moved near trailhead
200820CMS007	N	Lines for moving trail
200820CMS008	S	Moving trail E- excavating S slope near center of creek
200820CMS009	S	Moving trail E- excavating S slope near center of creek at about noon
200820CMS010	S	City people at trailhead
200820CMS011	P	Screenshot of iCloud storage notice
200820CMS012	S	Two excavators- moving trail E
200820CMS013	S	Project at 1:15pm
200820CMS014	NE	Neighbors on top of N slope
200820CMS015	E	Project at 1:15pm
200820CMS016	W	Project at 1:15pm
200820CMS017	E	SE slope/ lower trail (E side) profile M2 and M4
200820CMS018	E	SE slope/ lower trail (E side) profile M2 and M4- shows SE slope
200820CMS019	E	SE slope/ E side of trail profile (further S/ up the trail)
200820CMS020	E	SE slope/ E side of trail profile (further S/ up the trail)
200820CMS021	N	Lower portion of trail after moved
200820CMS022	S	Upper portion of trail finishing moving
200820CMS023	SE	Widening creek in middle/ cutting in base of trail
200820CMS024	SE	Metal cable with loop
200820CMS025	P	Metal cable with loop
200820CMS026	P	Metal cable with loop
200820CMS027	S	Digging below drainage ditch in N slope
200820CMS028	S	Project at 3pm- digging at creek bed
200820CMS029	N	Widening creek at downstream/ W end at about 4pm

Number	View	Description
200820CMS030	P	Metal bands from wood pipe in M1
200820CMS031	P	Metal bands from wood pipe in M1
200820CMS032	N	Downstream end of day
200820CMS033	NW	Downstream end of day
200820CMS034	N	End of day
200821CMS001	P	Day info (photo log)
200821CMS002	NW	Start of day- downstream end
200821CMS003	S	Start of day- black tarp on trailhead
200821CMS004	SW	Start of day- base of trail and center of creek
200821CMS005	SW	Start of day- downstream end
200821CMS006	NE	Start of day- upstream end
200821CMS007	NW	Digging at downstream end
200821CMS008	NW	Digging at downstream end
200821CMS009	NW	Placing tree in downstream end
200821CMS010	NW	Project at 9:30am
200821CMS011	NW	Soupy mixture of M2 and creek bed
200821CMS012	N	Placing jute on edge of creek
200821CMS013	N	Jute and fill on edges of creek
200821CMS014	E	Widening and finishing end of downstream
200821CMS015	NW	Widening and finishing end of downstream
200821CMS016	N	Digging creek bed
200821CMS017	S	End of day
200824CMS001	P	Day info (photo log)
200824CMS002	W	Start of day
200824CMS003	N	End of finished creek bed- excavator where unfinished
200824CMS004	NE	Base of trail/ center of creek unfinished
200824CMS005	N	Digging creek bed
200824CMS006	NE	Digging creek bed
200824CMS007	NE	Digging creek bed
200824CMS008	NE	Logs vertical set into creek bed
200824CMS009	NE	Digging creek edge near base of trail
200824CMS010	NE	Digging creek bed in center of trail
200824CMS011	NE	Project at 11:50am
200824CMS012	S	Project at 1:30pm- downstream end
200824CMS013	SE	Project at 1:30pm- base of trail/ center of creek
200824CMS014	SE	Base of trail- will dig tomorrow
200824CMS015	E	Base of trail- will dig tomorrow
200824CMS016	NE	Digging at base of trail
200824CMS017	N	Orange lines show creek bed edge
200824CMS018	N	Digging creek bed
200824CMS019	NE	Digging base of trail
200824CMS020	E	Project at about 3pm- shows orange lines where dig tomorrow

Number	View	Description
200824CMS021	NE	Digging at creek bed in upstream end at about 4pm
200824CMS022	S	Digging/ finishing edges in base of trail at about 4pm
200824CMS023	NE	Digging creek bed on upstream area
200824CMS024	NE	Working on jute on creek edge about 4:30pm
200824CMS025	W	End of day
200828CMS001	NW	Flat, grassy area east end of project
200828CMS002	W	Flat, grassy area east end of project
200828CMS003	SW	Flat, grassy area east end of project
200828CMS004	W	Flat, grassy area east end of project
200828CMS005	E	Flat, grassy area east end of project - shows where crushed rock was
200828CMS006	N	Trailhead
200828CMS007	N	Project finished - shows creek
200828CMS008	N	Project finished - shows creek and trail
200828CMS009	NE	Project finished - creek northeast end and upstream
200828CMS010	SW	Project finished - creek southwest end and downstream
200828CMS011	N	Flat, grassy area
200828CMS012	P	Ground where they had put crushed rock - shows edge of road into park
200828CMS013	P	Ground where they had put crushed rock - shows edge of road into park