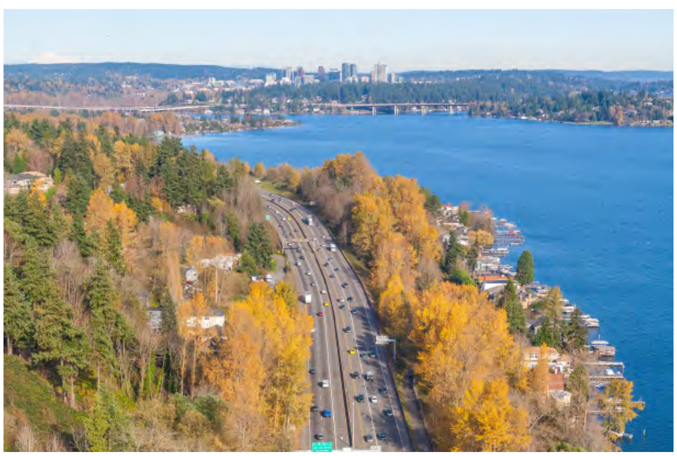
July 2018

I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project (MP 0.0 to 11.9)

Attachment E: Cultural Resources Survey



Note to readers:

The cultural resources documentation for the portion of the Project from I-5 to SR 167 is in Attachment M.

Title VI

It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7090.

Americans with Disabilities Act (ADA) Information

This material can be made available in an alternate format by emailing the Office of Equal Opportunity at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Notificación de Titulo VI al Público

Es la póliza de el Departamento de Transportes del Estado de Washington de asegurar que ninguna persona sea excluida de participación o sea negado los beneficios, o sea discriminado bajo cualquiera de sus programas y actividades financiado con fondos federales sobre la base de raza, color, origen nacional o sexo, como proveído por el Título VI de el Acto de Derechos Civiles de 1964. Cualquier persona que cree que sus protecciones de Titulo VI han sido violadas, puede hacer una queja con la Oficina de Igualdad de Oportunidades (OEO). Para información adicional con respecto a procedimientos de quejas de Titulo VI y/o información con respecto a nuestras obligaciones sin discriminación, por favor de comunicarse con el Coordinador de Titulo VI de la Oficina de Igualdad de Oportunidades (OEO) (360) 705-7090.

Información del Acta Americans with Disabilities Act (ADA)

Este material es disponible en un formato alternative. Envie su petición por correo electrónico al equipo de Oficina de Igualdad de Oportunidades (OEO) en wsdotada@wsdot.wa.gov o llamando gratis, 855-362-4ADA (4232). Personas sordas o con problemas de audición pueden solicitar llamando el relé de estado de Washington al 711.

Cultural Resources Survey for the Washington State Department of Transportation's I-405 Renton to Bellevue Improvement Project: SR 169 to I-90, King County, Washington

By: Ryan Ives, Jennifer Thomas, Stephen Emerson, Jason Jones, and Timothy J. Smith

Principal Investigator: Stan Gough

Submitted to Washington State Department of Transportation, Northwest Region
Agreement GCB-1426, Task Order Document AL

Short Report DOT2016-06
Archaeological and Historical Services
Eastern Washington University

May 2016
Revised September 2016

Table of Contents

List of Figures

Figures, continued.

List of Tables

Archaeological and Historical Services, Eastern Washington University
Cultural Resource Short Report Form

Authors: Ryan Ives, Jennifer Thomas, Stephen Emerson, Jason Jones, and Timothy Smith
Date: May 2016
USGS Quadrangle: Mercer Island, Wash (2014), and Renton, Wash. (1994)
Location (Sec., T, R): Sections 5, 8, and 17 of T25N, R5E; Sections 4, 8, 9, 16, 17, 20, 29, and 32 of T24N, R5E

PROJECT DATA

Agency/Sponsor: Washington State Department of Transportation (WSDOT)

Agreement No., Task Order Document: GCB1426, AL

PROJECT DESCRIPTION

Washington State Department of Transportation (WSDOT) plans to construct the first stage of construction for the I-405 Renton to Bellevue Improvement Project, from SR 169 to I-90 (the Project) to provide capacity and other improvements within approximately 10 miles of the I-405 corridor (Figure 1). The Project will add one new lane in each direction of I-405 from MP 4.0 to MP 11.9. The additional lanes will be combined with existing HOV lanes to create a new dual lane express toll system in both directions. A new auxiliary lane will also be added southbound between MP 9.3 and MP 10.7. There will be a total of 4 lanes in each direction from MP 4.0 to MP 9.3 and from MP 10.7 to MP 11.5, and 5 lanes in each direction from MP 9.3 to MP 10.7. The interchanges at NE 44th Street (~MP 7.48) and 112th Ave (~MP 9.25) will be reconstructed to accommodate the additional lanes and new direct accesses. Also, the southbound I-405 eastbound I-90 ramp will be widened to two lanes. The Project will also widen the southbound overpass over NE Park Drive (MP 5.42), widen both the northbound and southbound overpasses over Sunset Blvd NE (~MP 4.53), and replace the I-405 bridges over May Creek (~MP 7.18) located south of the NE 44th Street interchange. In addition to widening and interchange improvements, the Project will address fish passage at four stream crossings: Gypsy Creek (MP 7.5); Gypsy Creek (MP 7.59); Unnamed Creek (MP 7.75); and, Unnamed Creek (MP 7.85). Other project improvements will include pavement markings, drainage improvements, permanent signing, illumination, intelligent transportation systems, and barriers. The cultural resources investigation area for the Project, as defined by WSDOT, includes the direct impact area where all ground disturbances are planned, as well as a larger resource evaluation buffer. This combined area is referred to in this report as the project resource evaluation area (see Figure 1).

Figure 1. *Topographic map showing the location of the I-405: SR 169 to I-90 Project resource evaluation area and previously recorded cultural resources within a mile (adapted from USGS topographic quadrangles Seattle South, Wash., Mercer Island, Wash., Issaquah, Wash., Des Moines, Wash., and Maple Valley, Wash.).*

Archaeological and Historical Services (AHS), Eastern Washington University, conducted the following tasks: search of site files available on the Washington Department of Archaeology and Historic Preservation (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD) database; field survey of the project resource evaluation area, including shovel test excavation; and, preparation of this report of findings and recommendations.

LOCATION

The Project is located along the I-405 corridor, beginning near the State Route (SR) 169 undercrossing in Renton, then northward through the I-90 Interchange, in King County, Washington. The Project extends from approximately Milepost (MP) 4.0 to MP 11.9, within Township 23N, Range 5E, Sections 5, 8, and 17; and Township 24N, Range 5E, Sections 4, 8, 9, 16, 17, 20, 29 and 32.

ENVIRONMENTAL BACKGROUND

Setting

The Project is located along the eastern edge of Lake Washington in the Puget Sound Lowland physiographic province (Franklin and Dyrness 1988:16). This province incorporates all of Puget Sound, separating the Cascade Range from the coastal hills and Olympic Mountains (Alt and Hyndman 1995:296; Thorson 1980:1). Much of the topography within the Puget Sound Lowland was formed by glacial activity during the Pleistocene epoch (ca. 1.6 million to 10,000 years ago). The Puget Lobe of the Cordilleran Ice Sheet reached its southern terminus in the vicinity of Centralia approximately 15,000 years ago (Booth 1994). By 13,500 years ago, the most recent stage of the Fraser Glaciation, the Vashon Stade, glacial ice had retreated from the project area. Expansive areas south of Bellevue were blanketed with glacial outwash sands and gravels deposited by meltwater streams. Following glacial retreat, marine waters returned to the Puget Sound. After a temporary southward re-advance of the Puget Lobe approximately 10,000 years ago, the Cordilleran Ice Sheet melted, and the regional Ice Age ended (Booth 1994; WSDOT 2005; 2006:E-2).

Vegetation re-established not long after the retreat of glacial ice. Species of pine took root on outwash plains which then gave way to scattered oak, grasses and Douglas fir. The general project area is located within the *Tsuga heterophylla*, or western hemlock, vegetation zone (Franklin and Dyrness 1988:70-93). There are a number of localized habitats within this zone, from forested uplands of Douglas fir, western hemlock and western red cedar to low, moist areas which contain cattails, vine maple and willow. Red alder and big leaf maple are the dominant secondary species and are common in the project corridor (WSDOT 2006:E-2). Invasive species such as Scots broom and Himalayan blackberry are also quite common and thrive in disturbed areas. Most of the nonpaved surfaces along the I-405 margins were grubbed and cleared, mulched, seeded and fertilized from the early days of construction (Washington State Highway Commission [WSHC] 1962a); these margins have since been lined with ornamental and exotic landscaping (Boswell et al. 2011:4-4).

Approximately one third of the Project is paved and mapped as Urban Land (Soil Survey Staff 2015). The remaining portion of the project resource evaluation area includes gravelly sand, sandy loam, silt loam and varieties of muck. Most of the I-405 corridor from Renton north to the I-90 interchange is mapped as Pleistocene glacial drift with a few areas of Holocene age deposits (Washington Department of Natural Resources [WADNR] 2016; Soil Survey Staff 2015; WSDOT 2005). A large portion of the project resource evaluation area is mapped as Alderwood gravelly sandy loam, which forms in loose ablation glacial till that mantles—to a depth of about three feet—very dense, consolidated lodgement till (Snyder et al. 1973).

> The dense, very hard characteristic of the lodgement till is probably largely due to consolidation caused by the weight of the glacier that occupied the area about 13,500 to 15,000 years ago. The maximum thickness of that glacial ice in the Seattle area is estimated to have been about 3,500 feet, thus providing the probable consolidating force. The till is compacted and partly cemented, particularly in the upper part [Snyder et al. 1973:81].

Holocene depositional settings are limited to stream channels within the project resource evaluation area. Mapped soils that formed in Holocene-age parent materials are Norma sandy loam along May Creek (south of the N 44th St. exit of I-405), Bellingham silt loam near Gypsy Creek (north of the N 44th St. exit of I-405), and Briscot silt loam along Coal Creek (Coal Creek Parkway exit of I-405). Otherwise, mapped soils formed in glacial parent materials. The potential for archaeological materials in the area is limited to near surface (upper ca. one meter) of soils formed in glacial sediments, and to greater depths in Holocene alluvium identified adjacent to current and former channels of the named creeks and unnamed tributaries.

Ground Surface Conditions

A large portion of the Project corridor has been disturbed by I-405 construction and urban development (WSDOT 2008:3-3). Most of the I-405 corridor between Renton and I-90 was constructed into a hillside above the east shore of Lake Washington. As a consequence of this topography, most of the corridor would have been cut, filled, and leveled to complete construction, resulting in few locations with depositional sedimentary integrity. Former stream channels were rerouted and buried in culverts under the roadway (WSDOT 2006:iv). Gravel-filled drainage ditches generally in excess of 3 feet deep were excavated at the toe of the cut-slope to control water and Gunnite (a mixture of sand, crushed rock, cement, and water) was then used to cover the slope for reinforcement (WSHC 1962b).

Peat present in construction areas was removed and resulting cavities backfilled with clean gravel during construction preparation (Humphres 1949a). Natural clay was also removed from work areas. In areas where there was a natural deposit of clay or peat too deep for complete excavation, the applicable section was covered by 25 feet to 30 feet of fill (Humphres 1948). The removal of fine-grained and organic sediments from within the work areas, coupled with the installation of large drainages and culverts to intercept and divert water, necessitated large-scale excavations beyond the traffic lanes (Humphres 1949b).

Additionally, portions of the project resource evaluation area may have been submerged under Lake Washington until the opening of the Lake Washington Ship Canal in 1916-1917. At that time, the lake level was lowered approximately 10 feet (3 meters), and, in effect, terminated the lakes' natural drainage, the Black River. The newly exposed lakeshore terrace quickly became valuable acreage and is now a roughly contiguous development of private residences (Touchin and Turner 2014:1; WSDOT 2006:E-2, E-3).

Archaeological resources are not expected in portions of the resource evaluation area where the development of I-405 has removed sediments down to Pleistocene glacial deposits. However, if the development of I-405 has covered the predevelopment ground surface with fill, potential exists for archaeological resources to be present on or below the predevelopment ground surface capped by fill (cf. Hetzel and Elder 2015:5-1).

ETHNOGRAPHIC/HISTORIC BACKGROUND

The Duwamish are the traditional occupants of the region. Their traditional territory included the Black, Cedar, Green and White river drainages. The Duwamish thought of these three rivers as one single waterway called *t-hw-duw* or "going inside." Duwamish villages were located on the shores of Elliott Bay, Lake Washington, Lake Sammamish and along the banks of the Sammamish River. Specifically, the lands north of I-90 were inhabited by the "Lake Duwamish," designated by early ethnographers as a people localized between the Duwamish proper and the Snoqualmie. The Sammamish, a band of the Duwamish, held the land between Lake Sammamish and Lake Washington, the nucleus of the current project resource evaluation area, as their traditional territory (Boswell et al. 2011:4-6; Suttles and Lane 1990; WSDOT 2006: E-6).

Similar to other Native American peoples in the region, a seasonal settlement and subsistence pattern was employed to take advantage of prominent resource areas. Winter villages were comprised of cedar plank houses and hand-hewn cedar longhouses. Temporary settlements shifted systematically through particular, seasonal resource locations. The native people harvested the numerous anadromous fish, non-salmonid fish, shellfish, local terrestrial mammals, and edible plants for sustenance, utilitarian goods, and medicine (Castile 1985; Suttles and Lane 1990).

Duwamish people spoke a Southern Lushootseed dialect and many places along the eastern shore of Lake Washington were designated in their native tongue. Villages derived their names most commonly from geographical landmarks (e.g., *Sbah-bah-DEED* or "little mountain," *Sa'tsakaL* or "water at head of a bay"), but also from spiritual beings (e.g., *Skai-TAW*) and localized activities (e.g., *Hwa 'utsegwiL* or "to carry a canoe over") (Bundy 2008:9; WSDOT 2006:E-7). Named areas along the eastern shore of Lake Washington include the mouth of May Creek, known as *Cbal'tᵘ* (or "place where things are dried") and *P!E'swi* (or "pressed, crowded back") (Waterman 1922). Additional information related to Native American place names in the general project area can be found in a number of studies (see Ballard 1929; Buerge 1989; Bundy 2008; Dailey 2003; Waterman 2001; WSDOT 2006).

The signing of the Point Elliott Treaty in 1855 assigned the Duwamish to the Port Madison Reservation on the Kitsap Peninsula, within the traditional territory of a neighboring tribe, the Suquamish. The Sammamish people were not explicitly designated under the terms of the Point Elliott Treaty and some continued to live in traditional locations like Lake Sammamish while others joined the Snoqualmie Tribe. In short, many Duwamish people from various bands were relocated to reservations, while some filed claims under the Indian Homestead Act, and others sought assimilation into local communities. In 1857, the United States Government established the Muckleshoot Reservation near present day Auburn, Washington, and today the Muckleshoot Tribe is accepted as the tribal successor of a majority of the displaced Duwamish bands (Boswell et al. 2011:4-6, 4-7; Castile 1985:26; Muckleshoot Indian Tribe 2015).

Lands along the eastern shore of Lake Washington have been significantly altered to make room for an ever-increasing number of non-native settlers. Local and regional undertakings were needed to increase settlement capacity and expand lands for agricultural and industrial pursuits. For approximately 150 years, rivers and streams have been built over, marshes have been filled, large expansive forests cleared, and hillsides cut, followed by re-contouring land for the railroad, local access roads, and the expansive highway system.

In 1850, Colonel Isaac Ebey canoed up the Duwamish River and became the first Euro-American to explore Lake Washington. By the 1860s, coal was discovered on the east side of the lake, near Coal Creek, and William Meydenbauer and Aaron Mercer staked large claims in the area (Hetzel and Elder 2015:3-4). Meydenbauer cleared a tract of heavily timbered land at the edge of a small bay on the eastern Lake Washington shore and built a summer cabin. Mercer established a more permanent homestead south of "Meydenbauer Bay" and began farming the western bank of Kelsey Creek (WSDOT 2006:E-17).

According to early area maps, Girard Kellogg was one of the first residents of the project area. A review of the General Land Office (GLO) map for T24N, R5E indicates an unnamed trail from Lake Sammamish extending along the north side of the present day I-90 alignment. It enters the vicinity of the I-405/I-90 interchange in Section 9, and proceeds through Section 16 in a southwesterly direction to the house of Girard Kellogg, located on the eastern shore of Lake Washington in Section 17 (Bureau of Land Management 1865). In 1869, this land was purchased by Jeremiah Benson, a lumberman and cook. Benson married Susan, daughter of Curly (Su-quardle) a hereditary chief of the Duwamish Tribe, and was stepfather to Julia, Susan's daughter with Henry Yesler, the lumber and real estate magnate who later served as Seattle mayor (Caldbick 2014).

Isaac Bechtel, Sr., officially initiated the timber industry in what is now downtown Bellevue in the 1870s (Hetzel and Elder 2015:3-4). Felled trees, as big as nine feet in diameter, were skidded by horse and ox to the eastern shore of Lake Washington and then floated across the lake to Phinney's Mill (Hushour 2014:13). One of Bellevue's first roads was NE 24th Street, which was built in 1879 and connected early occupants and their timber, as well as other goods, to Lake Washington for further transport (Hushour 2014:12). Within a decade, steamboats on Lake Washington began offering a regular schedule and direct route for travelers between Seattle and the eastern shores of Lake Washington, which helped but did not solve the problem of isolation for settlers east of Lake Washington (Boswell et al. 2011:4-8).

In the 1880s, coal became one of the leading King County growth forces and attracted laborers of European descent, as well as Chinese and African American workers; this led to an increase in population and a need for further development. Settlers continued to clear large tracts of land to set up extensive farms for bulb cultivation and berry growing. The abundant timber continued to be cut down for housing as well as mining operations. The timber still was skidded to the lake but also moved by short rail spurs which were built in the bottomlands of local streams (Hetzel and Elder 2015:3-4, 3-5; WSDOT 2006:E-15—E-7).

In 1875 five miles of the Seattle & Walla Walla Railroad & Transportation Company (S&WW) rail line were completed between Steele's Landing on the Duwamish River and the Renton coal mines. Within two years the entire 15 miles of line were built to connect the landing on the Duwamish to the coal mines of Renton. Owners of S&WW planned to connect to Walla Walla, as the original name indicated, but this goal was never accomplished. Henry Villard bought the Seattle & Walla Walla in 1880, and reorganized it as the Columbia & Puget Sound Railroad (MacIntosh and Crowley 1999). In 1883, the Columbia & Puget Sound Railroad constructed a spur from Renton north to the coal fields of Newcastle and Coal Creek. The Columbia & Puget Sound Railroad again changed names in 1916 and reemerged as the Pacific Coast Railroad Company and, with later merges and expansions, eventually became part of the Northern Pacific.

In 1886 the Seattle, Lakeshore and Eastern (SLS&E) rail was under construction along the north side of Lake Washington and the eastern shores of Lake Sammamish enroute to Snoqualmie Pass. The SLS&E employed railroad men, construction crews, and additional laborers from Europe and Asia and provided an economic boost to the area. The railroad was a key factor in the growth of Bellevue. By 1890, the Northern Pacific Railway owned the majority interest of the SLS&E and planned to create the Northern Pacific Railway Lake Washington Belt Line Company, which would complete the line up the east side of Lake Washington. The railroad line was to connect a newly constructed steel mill developed by Peter Kirk, near contemporary Kirkland, to coal and iron mines in the Cascade Mountains. However, due to impending financial crises in 1893, the route was not completed. By 1897, the Klondike Gold Rush had returned economic prosperity to the Puget Sound region. Increasing congestion of railways along the Seattle waterfront renewed interest in completing the belt line and construction began on the connecting segment between Kelsey Creek and Woodinville (Boswell et al. 2011:4-10, 4-11).

In 1903-1904, the Lake Washington Belt Line was completed between Black River Junction, near Renton, to Woodinville (Cheever 1949:96; King County Parks 2015:11). The Wilburton community became home to the Hewitt-Lea lumber mill, once located where the I-405 now crosses SE 8th Street in Bellevue. In 1904, the Hewitt-Lea mill had grown enough for the town of Wilburton to be platted. Also in 1904, the large Wilburton Trestle was erected over Kelsey Creek near SE 8th Street and the Northern Pacific Railway Lake Washington Belt Line officially connected Bellevue to Renton and surrounding areas. This connection expanded the economic market and Bellevue was officially mapped as a new city. The Wilburton area continued to thrive in the expansive timber market and logs from that area were floated down Kelsey Creek to be taken to Seattle and south to Tacoma (Boswell et al. 2011:4-11; Stein 2010; Touchin and Turner 2014:7; WSDOT 2006:E-17). By 1911 Bellevue was prosperous and had a firm hold on area produce and timber export, but still was only home to about 150 people (Boswell et al. 2011:4-8).

In 1916, Lake Washington was partially drained lowering the surface elevation nine vertical feet to facilitate construction of the Ship Canal, which was completed the following year. The opening of the Lake Washington Ship Canal created a direct route from Lake Washington to Puget Sound allowing more regular business ventures between Puget Sound and the previously isolated Bellevue area. Mercer Slough, once the western-most segment of Kelsey Creek, was a major route of transport and travel from Lake Washington to near Main Street in Bellevue. Lowering Lake Washington drained marshlands in the Kelsey Creek drainage, including Mercer Slough. The former slough quickly became one of the most productive agricultural areas around Lake Washington (Emerson 2011:3; Hushour 2014:14; WSDOT 2006:E-17, E-18).

In 1940, the Lake Washington Floating Bridge (I-90) was completed which greatly increased transport to and from Bellevue. In 1953, the city of Bellevue was incorporated and 10 years later a second floating bridge, the Evergreen Point (SR 520), opened which further assisted growth and transformation of the now large city (Stipe 2010:3).

Renton became an attractive suburb due to the growth of other local industries (including farming, a glass factory, lumber mills, and brick and tile plants) and development of an interurban rail line. In 1916, the Duwamish River was dredged and straightened, diverting the White River. According to Bundy (2008:13):

> Along with seasonal flooding, all of these activities affected the Duwamish, White, Green, and Black rivers, as well as the people who used these rivers. The Green River now occupies an old channel of the White River, and when the Montlake Cut construction was completed connecting Lake Union with Lake Washington, the Black River suffered extinction because the water level in Lake Washington fell below the elevation of the lake's outlet to the river's headwaters (HistoryLink 2008: Reinartz 1991:106-107; Thrush 2006).

The Renton area grew significantly in the mid to late twentieth century. Renton Hill, just south of the Cedar River along I-405, developed as one of the earliest neighborhoods in the vicinity, due to the influence of the coal industry in the late 1800s. As that activity slowed, private residences replaced earlier company housing for employees. The community enjoyed easy access to nearby downtown Renton businesses, yet provided a semi-bucolic setting on the steep, wooded hillside, with excellent views to the south toward Lake Washington and, eventually, to the climbing skyline of Seattle. Some of the earlier houses were quite stately, but the difficult terrain largely limited the scale of later buildings. The oldest extant house in the Renton Hill neighborhood was constructed in 1898, while most of the other houses were built between 1900 and 1930. By the 1950s and 1960s, newer residences were either replacing older buildings or filling the spaces between the earlier houses.

Significant to twentieth century development of the Renton/Bellevue area was the Boeing Airplane Company, an aerospace industry leader with major facilities in Renton. A record-setting manufacturing firm with a large production force, Boeing, originally located along the eastern shore of Lake Washington, moved to its current location on the Duwamish River in 1917 (WSDOT 2006:E-21). In 1919, "King County constructed a network of paved roads connecting population centers" and Boeing may have been partially responsible for this development (Hushour 2014:13). Interstate 405 was constructed in the 1960s at the location of former State Highway 1 also spurring growth and industrial development.

Traditional Cultural Properties

Records on file at DAHP do not indicate there are traditional cultural properties (TCPs) reported within or near the project resource evaluation area. However, Native Americans are likely to have fished, hunted, and gathered plant resources in the general vicinity. On February 11, 2016, AHS sent informal letters to the Muckleshoot Tribe, the Snoqualmie Nation, and the Confederated Tribes and Bands of the Yakama Nation requesting tribal participation in the identification of cultural resources in and around the project resource evaluation area that may be of tribal interest. To date, no response has been received.

Previous Investigations

One previously recorded cultural resource, a segment of the Northern Pacific Lake Washington Belt Line (Allen and O'Brien 2007), is partially within the project resource evaluation area. Abandoned segments of this grade have been recorded both to the south (site 45KI538, the Columbia and Puget Sound Railroad) and to the north (site 45KI1274, the Northern Pacific Railway Lake Washington Beltline [abandoned segment]) of the project resource evaluation area. The portion of this resource in the evaluation area is discussed below.

Hundreds of historic property inventory forms have been recorded for structures/buildings within one mile of the resource evaluation area. Of these historic properties, four are listed in the national or state historic registers. The Frederick W. Winters House is listed in the National Register of Historic Places (NRHP). The Renton Substation of the Snoqualmie Falls Power Company, the Renton fire station, and the Wilburton Trestle are all listed in the Washington State Historic

Register (WHR). Information regarding the four listed properties and archaeological sites recorded within a mile of the Project are presented in Table 1 (see Figure 1).

Table 1. Selected Resources within One Mile of Project.

Site Number	Site Name	Type	Comments
45KI74	Renton Substation	historic substation	WHR listed
45KI209	Renton fire station	historic fire station	WHR listed
45KI211	Renton Coal Mine, Renton Civic Dump	mine related structures and surface features	
45KI404	PBM-3	wrecked patrol boat	
45KI262	Wilburton Trestle	historic railroad property	WHR listed, on Northern Pacific Lake Washington Belt Line
45KI425	unknown amphibian aircraft	submerged aircraft	
45KI501	Renton High School Indian Site	pre contact hearth features	
45KI538	Columbia and Puget Sound Railroad	railroad related structures, objects and artifacts	related to Northern Pacific Lake Washington Belt Line
45KI542	historic debris scatter	concrete foundation, historic debris	
45KI587	Dexudidew, the Little Cedar River Fishing Site	pre contact midden deposits related to fishing	
45KI606	Frederick W. Winters House	historic residence	NRHP listed
45KI686	Henry Moses Aquatic Center Site	pre contact hearth features	
45KI786	2209 Edmonds Avenue Human Burial	human remains	
45KI814	Floating Dry Docks YFD 48&51	wooden, floating dry dock remnants	
45KI848	Renton Glass Company factory	structure remains	
45KI1008	none	historic debris scatter	
45KI1009	Moses Homestead	historic debris scatter	
45KI1010	RHS ball field site	pre contact lithic scatter and midden	
45KI1107	Reilly Tar & Chemical Wharf and T-Dock	T-Dock and wharf remnants	
45KI1217	none	pre contact lithic scatter, historic debris scatter	
45KI1218	none	historic debris scatter	
45KI1274	Northern Pacific Lake Washington Belt Line	historic railroad property	abandoned segment, some rails and ties removed
-	May Creek Grade	historic road	

Numerous cultural resources investigations have been conducted within a mile of the project resource evaluation area, six of which cross or are adjacent to a segment of the resource evaluation area (Bowden et al. 1997; Bundy 2008; Jones 2015a, 2015b; Juell 2001; Smith et al. 2014). Apart from the segment of the Northern Pacific Lake Washington Belt Line (discussed below), none of the cultural resources identified during previous investigations (see Table 1) are within the resource evaluation area and none will be impacted by proposed project activities.

CULTURAL RESOURCE SURVEY RESEARCH DESIGN

Objectives and Background

The objective of this study is to assist WSDOT in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, by the location and preliminary characterization of both previously and as yet unidentified cultural resources within the resource evaluation area. Archaeological fieldwork described in this report was conducted in compliance with the 2008 I-405 Corridor Programmatic Agreement (PA) developed between the Federal Highway Administration (FHWA), WSDOT, the Washington State Historic Preservation Office (SHPO), the Muckleshoot Indian Tribe, and the Snoqualmie Indian Tribe (WSDOT 2008a). In 2015, AHS was contracted in support of Tasks IV.C.1 and IV.C.2 of the PA to create a map set illustrating archaeological potential within the WSDOT right-of-way along I-405 from SR 169 in Renton to NE 6th Street in Bellevue. A map set illustrating 90 archaeological potential zones along I-405 between Renton and Bellevue was produced and subsequently split to reflect two projects along I-405 (Jones 2015a, 2015b). The 90 zones are in three broad categories of archaeological potential defined in Task IV of the PA (WSDOT 2008a) and guided by a comparable study, the WSDOT I-405 Tukwila to Renton Improvement Project (Bundy 2008), also in support of the PA. The three broad zone categories are:

- *Unrestricted Zones* are locations where Holocene age native surfaces and post-glacial soils and sediments have been removed entirely. The design-builder may locate any ground-disturbing project element in an Unrestricted Zone without any further cultural resources review (per PA Task IV.C.3, see WSDOT 2008a).

- *Fill Zones* are locations identified as having deep fill, where native soils and possibly buried surfaces still may be present under the fill. Each fill zone was labeled on a map with a number indicating the estimated depth of fill. The design-builder may locate any ground disturbing project element in a Fill Zone when design indicates disturbance will not exceed three-quarters (3/4) of the total fill depth (to account for over-excavation). A sub-category of the *Fill Zones* is *Road Prism Fill Zones* which are locations identified as having deep fill, where native soils and possibly buried surfaces still may be present under the road prism. Ground disturbing work beyond the demonstrated depth of the road prism requires archaeological review (per PA Task IV.C.4, see WSDOT 2008a; Bundy 2008:17, 20).

- *Restricted Zones* are locations with little to no previous ground disturbance and native sediments and buried surfaces are likely to be present. The design-builder may NOT locate

> any ground-disturbing project element, regardless of the depth of the projected ground disturbance, in a Restricted Zone until it is reviewed and approved (in email or letter) by the WSDOT in consultation with interested and affected tribes and SHPO (per PA Task IV.C.5, see WSDOT 2008a).

This report presents cultural resources survey and shovel testing results for the Project by zone (cf. Jones 2015b).

Methods

Prior to fieldwork, a site search of the DAHP online WISAARD database was undertaken to determine if cultural resources have been previously identified within or near the resource evaluation area. Background research was conducted at local repositories. The King County Assessor's Office on-line database was accessed to determine build dates for structures within the resource evaluation area.

All field work reported here followed procedures as set forth in the PA and the Guidelines (WSDOT 2008a, 2008b). The Guidelines established levels of archaeological probability based on environmental variables and historic land-use. Areas of high archaeological probability include gently sloped (0-10 percent) areas and locations within 200 feet of water sources. Areas of moderate archaeological probability include moderate slopes (10-30 percent) and areas >200 feet from water sources. Low probability areas are those characterized by steep slopes (>30 percent) or those areas located far from water sources (Smith 2014:2; WSDOT 2008b).

A shovel testing strategy was formulated based on expectations concerning the potential for intact landforms and buried cultural resources. This strategy was based upon: (1) the framework for fieldwork provided in the Guidelines (WSDOT 2008b); (2) the archaeological potential zone maps (Jones 2015b); (3) the WSDOT project excavation contour map-set (WSDOT 2015); and, (4) the results of previous subsurface investigations within or in proximity to the I-405 right-of-way (see Bowden et al. 1997; Jones 2015b; Kanaby et al. 2009; Schneider et al. 2015; WSDOT 2006). A shovel test grid was created with ArcMap 10.3.1 GIS software with shovel tests plotted every 30 meters across the project resource evaluation area.

From March 10 to March 29, 2016, AHS archaeologists Ryan Ives, Patrick Fristoe, Jessica Goodwin, Caitlin Limberg, and Christopher Yamamoto completed a walking survey and shovel testing of the project resource evaluation area. Survey was not conducted over those portions of the project resource evaluation area covered by paved surfaces, inundated areas, areas with impenetrable vegetation, and where slope exceeded 30 percent. Pedestrian survey transects were no wider than 10 meters. Subsequent to the March fieldwork, revised ground disturbance mapping resulted in adjustment of the resources evaluation area. Additional survey and shovel testing were undertaken June 27 through 30, 2016, by AHS archaeologists Ryan Ives and Kelly Clark, to investigate those proposed ground disturbance areas not previously covered.

All shovel tests (STs) measured approximately 40 centimeters in diameter and were excavated to depths possible using a shovel (ca. 100 centimeters) or to impenetrable matrix. When feasible and appropriate, excavations were extended using a 10-centimeter-diameter (4-inch-diameter) bucket auger until excavation was terminated due to impenetrable surfaces or saturation. All excavated sediments were screened through ¼-inch-mesh hardware cloth and all excavations backfilled following data gathering. Shovel tests were not excavated in areas covered by paved surfaces, areas covered by standing water, areas with impenetrable vegetation, and where slope exceeded 30 percent. In addition, shovel testing was not conducted in portions of the project resource evaluation area adjacent to marked subsurface utility corridors or adjacent to visible (aboveground) utility infrastructure. A hand held Global Positioning System (GPS) receiver with sub-meter accuracy was used to record each shovel test location. Shovel tests were numbered sequentially. Work area overviews photographs and representative subsurface stratigraphy photographs were collected. All field data were entered on standard AHS forms/logs. Field notes, photographs, maps, correspondence, and other records generated during this study are on file at the AHS office in Cheney.

The built environment survey of the resource evaluation area was undertaken by Stephen Emerson, AHS Program Director, March 2 through 4, 2016. At the request of WSDOT, Mr. Emerson visited the project area again September 22 through 24, 2016, to survey the segment of the former Northern Pacific Lake Washington Belt Line adjacent to the project resource evaluation area between MP 6.7 and MP 9.2, and the site of the former Wilburton Tunnel, demolished in 2008, at approximately MP 11.5. Major features, including overpasses, trestles, and grade crossings were noted and photographed.

Survey tasks were documented through completion of field notes and appropriate AHS field forms and digital photographs. Work area overview photographs and representative subsurface stratigraphy photographs were collected. All field data were entered on standard AHS forms/logs. Field notes, photographs, maps, correspondence, and other records generated during this study are on file at the AHS office in Cheney.

RESULTS

No archaeological sites or isolates were identified in the Project resource evaluation area. Survey and shovel testing verified that few locations remain within the resource evaluation area with natural, intact surfaces or sub-surface stratigraphy. One previously recorded cultural resource was revisited, a segment of the Northern Pacific Lake Washington Belt Line. Nine buildings over 45 years of age were recorded through the WISAARD historic property inventory database. Project maps, based on 1:24,000 USGS quadrangles, are presented in Appendix A. Detailed maps showing zone areas, shovel test locations, and identified resource locations are presented in Appendix B. Shovel test data, including final depths, sediment descriptions, and stratigraphic interpretations are presented in Appendix C. Appendix D provides shovel test profile drawings, and representative shovel test photographs are presented in Appendix E. Appendix F presents photographs and descriptions of the recorded structures recommended ineligible for listing in the NRHP.

Shovel Testing Results

A total of 209 shovel tests were excavated throughout the project resource evaluation area. Excavation depths ranged from 10 to 125 centimeters below surface (cmbs) when factors such as cobbles, water, tree roots, or compact sediments prevented further excavation. Sediments generally consisted of gravelly to extremely gravelly loamy sands which were generally very compact at depths greater than 50 cmbs. These sediments are consistent with mapped Pleistocene glacial drift in the region. No historic or precontact cultural materials were located during survey and shovel testing. Shovel tested zones are addressed below; see Appendix B maps for shovel test locations and Appendix C for shovel test data.

Within the 315.5 acre resource evaluation area from SR 169 to I-90, 16 zones (totaling 22.3 acres) are designated Restricted, 15 zones (totaling 21.7 acres) are Unrestricted, and 41 zones (totaling 260.5 acres) are Fill zones. The remaining 11.1 acres along Lake Washington Boulevard fall outside of archaeological potential zones (cf. Jones 2015b). Numbers of shovel tests (STs) excavated by zone are presented in Table 2.

Table 2. Summary of Shovel Testing Effort, by Zone.

Zone	Zone Type	Acres	STs (n=)	Comments
1	Fill	0.41	2	
2	Unrestricted	1.19	0	cut slope with impenetrable vegetation
3	Fill	7.23	0	paved surface
4	Fill	0.05	0	inaccessible due to impenetrable vegetation
5	Fill	37.71	19	
6	Restricted	0.07	0	reduced footprint, utilities present
7	Fill	0.06	0	reduced footprint, utilities present
8	Unrestricted	2.69	0	cut slope with impenetrable vegetation
9	Fill	0.17	0	inaccessible due to impenetrable vegetation
10	Restricted	0.11	0	inaccessible due to impenetrable vegetation
11	Unrestricted	1.57	0	cut slope with impenetrable vegetation
12	Fill	0.36	0	utilities present
13	Fill	0.10	0	reduced footprint, utilities present
14	Unrestricted	0.00	0	zone outside resource evaluation area
15	Fill	0.02	0	reduced footprint, steep slope
16	Fill	0.00	0	zone outside resource evaluation area
17	Restricted	0.12	0	standing water
18	Fill	24.23	10	
19	Unrestricted	1.81	0	cut slope with impenetrable vegetation
20	Fill	7.99	0	paved surface

Table 2, continued.

Zone	Zone Type	Acres	STs (n=)	Comments
21	Fill	0.48	4	
22	Restricted	0.11	0	reduced footprint with impenetrable vegetation
23	Fill	0.08	0	reduced footprint, utilities present
24	Fill	0.00	0	zone outside resource evaluation area
25	Fill	23.28	1	
26	Fill	0.00	0	zone outside resource evaluation area
27	Restricted	0.00	0	zone outside resource evaluation area
28	Unrestricted	2.52	0	footprint reduced to paved surface
29	Restricted	3.06	5	
30	Restricted	1.30	8	
31	Fill	1.00	1	
32	fill	0.00	0	zone outside resource evaluation area
33	Fill	1.01	3	
34	Fill	1.32	7	
35	Fill	63.44	24	
36	Restricted	1.44	5	
37	Fill	0.97	5	
38	Fill	1.05	3	
39	Fill	1.35	0	standing water, utilities present
40	Restricted	1.22	3	
41	Fill	0.88	0	utilities present
42	Unrestricted	0.40	3	
43	Restricted	3.06	14	
44	Unrestricted	5.33	0	footprint reduced to paved surface
44a	Restricted	1.98	9	
45	Restricted	3.40	16	
46	Fill	0.98	0	utilities present
47	Unrestricted	2.17	0	utilities present
48	Fill	1.04	4	
49	Fill	34.56	3	
50	Fill	0.21	0	utilities present
51	Fill	0.87	0	utilities present
52	Fill	1.03	3	
53	Fill	1.78	8	
54	Unrestricted	1.43	5	
55	Restricted	0.00	0	zone outside resource evaluation area
56	Fill	0.15	0	steep slope
57	Restricted	2.55	6	
58	Restricted	3.87	3	
59	Fill	0.08	0	standing water
60	Restricted	0.00	0	zone outside resource evaluation area
61	Fill	31.40	4	
62	Unrestricted	0.18	0	steep slope
63	Unrestricted	0.18	0	paved surface
64	Fill	0.00	0	zone outside resource evaluation area
65	Unrestricted	1.18	2	

Table 2, continued.

Zone	Zone Type	Acres	STs (n=)	Comments
66	Fill	0.00	0	zone outside resource evaluation area
67	Unrestricted	0.03	0	steep slope
68	Fill	0.77	0	standing water
69	Fill	13.32	3	
70	Unrestricted	0.99	0	steep slope
71	Fill	1.01	5	
LWB	n/a	11.10	21	area along Lake Washington Blvd. outside zones

Of the 72 zones defined for the I-405 corridor from SR 169 to I-90 (Jones 2015b), 62 zones fall within the resource evaluation area. Ten of the archaeological potential zones identified (Jones 2015b) are outside the project resource evaluation area (Zones 14, 16, 24, 26, 27, 32, 55, 60, 64, and 66). Portions of the resource evaluation area extending beyond archaeological potential zones were included with an adjacent zone on the same landform (see Appendix B). The segment of Lake Washington Boulevard in the resource evaluation area (from the intersection with the Coal Creek exit of I-405 north to I-90) and including a section of SE 40th Street (extending west from its intersection with Lake Washington Boulevard) was outside of any zone (see Figures B.16, B.18, and B.19). The north end of this portion of the project resource evaluation area (north of SE 40th Street) borders the low lying Mercer Slough wetland. The south end of this portion of the project resource evaluation area (south of SE 40th Street) is a residential subdivision. Shovel test results for this portion of the project resource evaluation area are addressed at the end of the numbered zones discussions below.

Shovel tests were excavated in 30 zones and in the area along Lake Washington Boulevard (see Table 2). Due to a variety of factors (i.e., paved surfaces, inundated areas, areas of impenetrable vegetation, areas with slopes greater than 30 percent, and subsurface utility corridors), no shovel tests were excavated in the other 32 zones (see Table 2). These untested zones represent a small portion of the entire Project, totaling 40.42 acres (13 percent) of the resource evaluation area (Table 3).

Table 3. Summary of Zones not Shovel Tested.

Zone Type	Zone Numbers	Total Acreage
Fill	3, 4, 7, 9, 12, 13, 15, 20, 23, 39, 41, 46, 50, 51, 56, 59, 68	21.35
Restricted	6, 10, 17, 22	0.41
Unrestricted	2, 8, 11, 19, 28, 44, 47, 62, 63, 67, 70	18.66
outside resource evaluation area	14, 16, 24, 26, 27, 32, 55, 60, 64, 66	N/A

Zone 1

This fill zone is in an island of compacted fill between the northbound on-ramp of I-405 from SR-169 Maple Valley Highway and the existing corridor of I-405 (Figure 2). Jones (2015b) excavated two shovel tests into compacted fill without reaching native sediments. An additional two shovel tests (STs 1 and 2) were excavated within the Zone 1 boundary during these investigations (see Figure B.2). As with the previous investigation both compaction and groundwater infill of excavated units halted excavation before the base of compacted fill was identified.

Zone 1 survey and shovel testing identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 1. While it is possible that intact sediments are present below the fill, surface grading likely conducted prior to transportation infrastructure construction would have greatly limited the potential for intact archaeological deposits within Zone 1. Archaeological site potential is low within Zone 1 and no further cultural resources work is recommended.

Zone 5

This fill zone is largely the paved lanes of I-405 between the Sunset Highway onramp to the south and the NE Park Drive to the north (Figure 3). Investigated with this zone is the portion of North 8th Street in Renton and an adjacent parking lot. The only unpaved portion of Zone 5 is the western boundary, which occupies a fill slope between the Houser Way bypass and I-405 southbound lanes. The eastern edge of the historic Black River parallels the length of this zone. Wetlands associated with the current channel of Johns Creek are located at the base of the slope near the intersection of Houser Way bypass and NE Park Drive. Deep augering in advance of the construction of the Lowe's Home Improvement Store in Renton, ca. 600 feet west of the project resource evaluation area, identified sediments interpreted as ancient wetlands and shallow near-shore deposits related to the ancestral Black River below a cap of fill materials (Hodges 2007).

A total of 19 shovel tests (STs 3-18, 20, 21, and 24) were excavated in or adjacent to Zone 5 on the slope above the Hauser Way bypass (see Figures B.4 and B.6). Native sediments were identified below gravelly fill in five of the shovel tests between 19 and 42 cmbs. Native sediments are compact grey silt loam, lacustrine sediments formed in glacial ice impounded lakes during the late Pleistocene. Zone 5 is largely at a higher elevation than the former Black River valley, and was likely a remnant terrace above the incised Black River valley which formed during the Holocene.

Aside from Northern Pacific Lake Washington Belt Line tracks, which cross N 8th street within Zone 5, survey and shovel testing identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present in Zone 5, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended within Zone 5.

Figure 2. *Crew excavating shovel tests in Zone 1, an island of compacted fill between the northbound I-405 on-ramp from SR-169 Maple Valley Highway and the I-405 corridor. View to the west.*

Figure 3. *Crew excavating ST 16 in Zone 5. Shovel tests were excavated on the fill covered slope between the Houser Way bypass and I-405 southbound lanes. View to the east.*

Zone 18

This fill zone is largely comprised of the paved lanes of I-405 north from Park Drive to Project MP 6.00. Included with the zone is an area to the east of Lake Washington Boulevard near the entrance to Gene Coulon Memorial Park (Figure 4). Ten shovel tests (STs 19, 22, 23, 25, 26, 28, 86, 88, 90, and 103) were excavated to the west and above the cut for the southbound lanes of I-405 (Figure 5) (see Figures B.6 and B.7). Native sediments, uncapped by fill, were identified in six of the STs. Native sediments were gravelly loamy sands, and mapped as glacial sandy out-wash which formed after the retreat of glacial ice during the late Pleistocene (Soil Survey Staff 2015).

Aside from tracks of the Northern Pacific Lake Washington Belt Line, which cross Lake Washington Boulevard near the south end of Zone 18, survey and shovel testing in Zone 18 identified no evidence of prehistoric or historic cultural materials or features. See the Built Environment Survey section below for a discussion of the Northern Pacific Lake Washington Belt Line. While evidence of intact Pleistocene sediments is present in Zone 18, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 18.

Zone 21

This fill zone comprises an area of earth mounds, presumably spoils from noise wall construction. The zone is bound by NE 30th Street on the north, I-405 southbound traffic on the east, Project MP 6.00 on the south (approximately) and a tall concrete noise wall to the west (Figure 6). Native sediments, uncapped by fill, were identified in all four shovel tests (STs 82, 84, 99, and 101) excavated in Zone 21 (see Figure B.7). However, the native sediments were disturbed to a depth greater than a meter, based on the presence of modern debris throughout screened sediments. Native sediments are mapped as glacial sandy outwash, gravelly loamy sands formed after the retreat of glacial ice during the late Pleistocene (Soil Science Survey 2016).

Survey and shovel testing in Zone 21 identified no evidence of prehistoric or historic cultural materials or features. While evidence of Pleistocene sediments is present in the sampled portion of Zone 21, disturbance related to transportation infrastructure construction has greatly limited the potential for intact archaeological deposits. Survey and shovel test results demonstrate that archaeological site potential within Zone 21 is low and no further cultural resources work is recommended.

Figure 4. *The area adjacent to Zone 18, showing ongoing commercial or residential construction to the east of Lake Washington Boulevard near the entrance to Gene Coulon Memorial Park. View to the east.*

Figure 5. *Crew excavating ST 19 in Zone 18. Shovel tests were excavated to the west and above the cut for the southbound lanes of I-405. View to the northeast.*

Figure 6. *Crew excavating in Zone 21. Native sediments were disturbed to a depth greater than a meter in the tested portion of Zone 21. View to the north.*

Figure 7. *Overview of I-405 from the NE 44th Street interchange, near the north end of Zone 25. Shovel test 76 was excavated in the traffic island at the southwest corner of the NE 44th Street interchange, shown in this photograph to the south.*

Zone 25

This fill zone is largely the paved lanes of I-405 extending north from NE 30th Street, to NE 44th Street, incorporating the edges of four traffic islands near the NE 44th Street interchange (Figure 7). A single shovel test (ST 76) was excavated in the traffic island at the southwest corner of the NE 44th Street interchange (see Figure B.10). Sediment compaction and groundwater infill halted excavation before the base of compacted fill was reached in the single shovel test. Native sediments, mapped as Holocene alluvial sandy loam likely associated with Gypsy Creek to the north, were not encountered in Zone 25.

Survey and shovel testing in Zone 25 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 25. While it is possible that intact sediments are present below the fill, surface grading related to transportation infrastructure construction has greatly limited the potential for intact archaeological deposits within Zone 25. Archaeological site potential is low within Zone 25 and no further cultural resources work is recommended.

Zone 29

This restricted zone includes wetland to the east of the I-405 fill slope from the May Creek crossing north to the NE 44th Street interchange. Five shovel tests were excavated in Zone 29, three (STs 37, 38, and 40) near the south end adjacent to the current May Creek channel (Figure 8) and two (STs 41 and 44) near the north end adjacent to a wetland, likely associated with Gypsy Creek, and the northbound I-405 off-ramp at NE 44th Street (Figure 9) (see Figure B.10). Holocene alluvial sandy loam associated with May Creek was identified in the three shovel tests excavated near the south end of the zone. Sediment compaction and groundwater infill halted excavation before the base of compacted fill was identified in the two shovel tests excavated near the Gypsy Creek wetland at the north end of Zone 29.

Survey and shovel testing in Zone 29 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 29, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 29.

Zone 30

This restricted zone is the May Creek crossing on the west side of I-405 (Figure 10). This zone has been recently landscaped as a park with native plantings and unpaved trails (McAskill Park). Native sediments, Holocene alluvial sandy loam associated with May Creek, were identified in all eight shovel tests (STs 33, 35, 36, 39, 42, 164, 173, and 175) excavated in or adjacent to Zone 30 (see Figure B.10).

Figure 8. *May Creek at the south end of Zone 29, located east of I-405, is shown in this photograph to the northwest.*

Figure 9. *The wetland at the north end of Zone 29, east of the northbound I-405 off-ramp at NE 44th Street, is shown in this photograph to the south.*

Figure 10. *Zone 30, which includes May Creek to the west of I-405, is shown in this photograph to the southeast.*

Figure 11. *Zone 31, a narrow wedge of road fill adjacent to the elevated I-405 southbound lanes southwest of the NE 44th Street interchange, is shown in this photograph to the south.*

Survey and shovel testing in Zone 30 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 30, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 30.

Zone 31

This fill zone is a narrow wedge of road fill adjacent to the elevated I-405 southbound lanes southwest of the NE 44th Street interchange (Figure 11). The south end abuts Zone 30 (McAskill Park). Native sediments, Holocene alluvial sandy loam associated with May Creek, were identified in the single test (ST 34) excavated at the south end of Zone 31 (see Figure B.10).

Survey and shovel testing in Zone 31 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 31, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 31.

Zone 33

This fill zone is the southern of two traffic islands in the southeast corner of the NE 44th Street interchange (Figure 12). Sediment compaction and groundwater infill halted excavation before the base of compacted fill was identified in the three shovel tests (STs 43, 46, and 48) excavated in Zone 33 (see Figure B.10).

Survey and shovel testing in Zone 33 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 33. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited potential for intact archaeological deposits in Zone 33. Archaeological site potential is low in Zone 33 and no further cultural resources work is recommended.

Zone 34

This fill zone is the northern of two traffic islands in the southeast corner of the NE 44th Street interchange (see Figure 12). Sediment compaction and groundwater infill halted excavation before the base of compacted fill was identified in the seven shovel tests (STs 45, 47, 49, 50, 52, 54, and 56) excavated in Zone 34 (see Figure B.10).

Survey and shovel testing in Zone 34 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 34. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits in Zone 34.

Figure 12. *Zones 33 and 34, two traffic islands in the southeast corner of the NE 44th Street interchange are shown in this photograph to the north. Zone 33 is in the foreground and Zone 34 is in the background.*

Figure 13. *The steeply sloping road fill prism below (west of) I-405 southbound lanes in Zone 35 is shown in this photograph to the north.*

Archaeological site potential is low in Zone 34 and no further cultural resources work is recommended.

Zone 35

This fill zone is largely the paved lanes of I-405 extending north from NE 44th Street to the Lake Washington Boulevard SE overcrossing near Project MP 9.23. This zone also includes portions of the sloping road fill prism below (west of) I-405 (Figure 13), as well as a large fill berm along the west side of I-405 near MP 8.85 (Figure 14). Portions of the western boundary of Zone 35 are defined by the tracks and grade of the Northern Pacific Lake Washington Belt Line. In addition to the previously mentioned areas, shovel tests were excavated near the south end of Zone 35 in a marshy area associated with Gypsy Creek east of Seahawks Way (Figure 15) and near the north end of Zone 35 in densely vegetated areas east of a bike path and Lake Washington Boulevard (Figure 16).

A total of 24 shovel tests (STs 53, 55, 57, 59, 60, 62, 64, 78, 80, 93, 95, 97, 152, 154, 161, 163, 172, 174, 176, 178, 181, 183, 185, and 187) were excavated in Zone 35 (see Figures B.10 through B.13). Native sediments, uncapped by fill, were identified in two of the shovel tests, while native sediments were encountered below fill in an additional eight of the excavated shovel tests (see Appendix C). Native gravelly loamy sands encountered were interpreted as glacial gravelly till with compact lodgement till, formed under advancing glacial ice, capped by loose gravelly ablation till which formed after the retreat of glacial ice during the late Pleistocene (Soil Survey Staff 2015).

Features of the Northern Pacific Lake Washington Belt Line, including tracks and a trestle over Ripley Lane near the south end and tracks adjacent to Pleasure Point Lane SE near the north end, are located within Zone 35. Survey and shovel testing within Zone 35 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present in portions of Zone 35, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 35.

Zone 36

This restricted zone is a short segment of Gypsy Creek in the northeast corner of the of the NE 44th Street interchange. This zone has been recently landscaped with native plantings (Figure 17). Native sediments were encountered below fill in the five shovel tests (STs 166, 168, 170, 177, and 179) excavated adjacent to Zone 36 (see Figures B.10 and B.11). Native sediments were a compact grey silt loam interpreted as lacustrine, formed in glacial ice impounded lakes during the late Pleistocene.

Survey and shovel testing in Zone 36 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present in portions of Zone 36, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 36.

Figure 14. *A large fill berm west of I-405 near MP 8.85 in Zone 35 is shown in this photograph to the southwest.*

Figure 15. *A marshy area near the south end of Zone 35, to the east of Seahawks Way, is shown in this photograph to the south.*

Figure 16. *A densely vegetated area to the east of the bike path and Lake Washington Boulevard near the north end of Zone 35 is shown in this photograph to the south.*

Figure 17. *Recent landscaping including native plantings within Zone 36, located in the northeast corner of the of the NE 44th Street interchange. The modern Gypsy Creek channel is at the right in this photograph to the south.*

Zone 37

This fill zone is predominantly a storm water retention pond in the northeast corner of the NE 44th Street interchange (Figure 18). Sediment compaction halted excavation before the base of compacted fill was reached in any of the five shovel tests (STs 27 and 29 through 32) excavated in Zone 37 (see Figures B.10 and B.11). Native sediments, mapped as Holocene alluvial sandy loam likely associated Gypsy Creek, were not encountered in Zone 37.

Survey and shovel testing in Zone 37 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 37. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits in Zone 37. Archaeological site potential is low in Zone 37 and no further cultural resources work is recommended.

Zone 38

This fill zone is predominantly a storm water retention pond in the northwest corner of the NE 44th Street interchange (Figure 19). Sediment compaction and groundwater infill halted excavation before the base of compacted fill was identified in any of the three shovel tests (STs 74, 89, and 91) excavated in Zone 38 (see Figure B.10). Native sediments, mapped as Holocene alluvial sandy loam likely associated Gypsy Creek, were not encountered in Zone 38.

Survey and shovel testing in Zone 38 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 38. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits in Zone 38. Archaeological site potential is low in Zone 38 and no further cultural resources work is recommended.

Zone 40

This restricted zone is a small riparian area associated with Unnamed Creek (MP 7.75) situated between private property to the north, Lake Washington Boulevard SE to the east and south, and the I-405 northbound road prism to the west (Figure 20). Native sediments were encountered below gravelly fill in one of the three shovel tests (STs 51, 58, and 72) excavated in Zone 40 (see Figure B.11). Native sediments are a compact grey silt loam interpreted as lacustrine sediments formed in glacial ice impounded lakes during the late Pleistocene.

Survey and shovel testing in Zone 40 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present below fill in portions of Zone 40, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 40.

Figure 18. *Crew excavating shovel tests on the eastern margin of a storm water retention pond located in Zone 37 is shown in this photopraph to the north.*

Figure 19. *The storm water retention pond located in Zone 38 is shown in this photograph to the northeast.*

Figure 20. *Densely vegetated Zone 40 is shown in this photograph to the south.*

Figure 21. *The densely vegetated slope in Zone 42 is shown in this photograph to the north.*

Zone 42

This unrestricted zone is a slope east of the northbound lanes of I-405 bound on the north by the bottomlands of Unnamed Creek (MP 7.85), on the east by the fenced yard of a private residence, and on the south by the small riparian area of Unnamed Creek (MP 7.75) (Figure 21). Native sediments, mapped as Holocene alluvial sandy loam and likely associated with one of the Unnamed Creeks immediately north and south of Zone 42, were encountered in one of the three shovel tests (STs 61, 70, and 87) excavated in Zone 42 (see Figure B.11).

Survey and shovel testing in Zone 42 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 42, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 42.

Zone 43

This restricted zone is adjacent to Unnamed Creek (MP 7.85) (Figure 22). This zone is bound by a cut hillside to the north and south, the drainage basin of Unnamed Creek (MP 7.85) to the east, and the elevated northbound lanes of I-405 to the west. Native sediments, mapped as Holocene alluvial sandy loam associated with Unnamed Creek (MP 7.85), were encountered in all 14 shovel tests (STs 63, 65 through 69, 71, 73, 75, 77, 79, 81, 83, and 85) excavated in and adjacent to Zone 43 (see Figure B.11). Groundwater infill halted excavation of shovel tests in Zone 43 before Pleistocene glacial sediments were identified.

Zone 43 survey and shovel testing identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 43, shovel test results demonstrate that archaeological site potential is low. No further cultural resource work is recommended in Zone 43.

Zone 44a

This restricted zone extends north of SE 60th Street (from approximately MP 8.70 to MP 8.83). It is an undeveloped area crossed by Unnamed Creek (MP 8.70) (Figure 23). Native sediments, mapped as Holocene alluvial sandy loam associated with Unnamed Creek (MP 8.70), were encountered in all nine shovel tests (STs 92, 94, 96, 98, 100, 105, 107, 109, and 111) excavated in Zone 44a (see Figure B.13).

Survey and shovel testing in Zone 44a identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 44a, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 44a.

Figure 22. *Marshy field fed by Unnamed Creek in Zone 43. View to the southeast.*

Figure 23. *Crew excavating shovel tests in an undeveloped area crossed by Unnamed Creek in Zone 44a. View to the north.*

Zone 45

This restricted zone is situated on what appears to be a natural slope east of I-405 northbound lanes between MPs 8.83 and 9.10, with periodic east to west sloping cuts likely associated with ephemeral or former stream channels that were dry at the time of survey (Figure 24). Native sediments, mapped as Holocene alluvial sandy loam associated with the unnamed streams, were encountered in all sixteen shovel tests (STs 102, 104, 106, 108, 110, 112-117, 119, 121, 123, 125, and 127) excavated in Zone 45 (see Figures B.13 and B.14).

Survey and shovel testing in Zone 45 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 45, shovel test results demonstrate that archaeological site potential is low. No further cultural resource work is recommended in Zone 45.

Zone 48

This fill zone contains a linear earthen berm, similar to the one at the north end of Zone 35 (Figure 25). Zone 48 is bound by Lake Washington Boulevard to the north and west and the Lake Washington Boulevard I-405 southbound on-ramp to the east and south. Sediment compaction halted excavation before the base of compacted fill was identified in the four shovel tests (STs 186, 188, 194, and 195) excavated in Zone 48 (see Figure B.14).

Survey and shovel testing in Zone 48 identified no evidence of prehistoric or historic cultural materials or features. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have likely greatly limited the potential for intact archaeological deposits in Zone 48. Archaeological site potential is low in Zone 48 and no further cultural resources work is recommended.

Zone 49

This fill zone is largely the paved lanes of I-405 extending north from the Lake Washington Boulevard SE intersection to the Coal Creek Parkway SE intersection near Project MP 10.25. Portions of Zone 49 are bordered on the west by the tracks and grade of the Northern Pacific Lake Washington Belt Line (Figure 26). A paved bike path crosses the northern portion of Zone 49 (from the entrance of Newcastle Beach Park north to Coal Creek Parkway) (Figure 27). A significant percentage of this zone includes the steep, boulder (or rock filled gabion) armored slope that supports the I-405 southbound traffic lanes. Sediment compaction halted excavation before the base of compacted fill was identified in the three shovel tests (STs 184, 192, and 193) excavated in/adjacent to Zone 49 (see Figures B.15 and B.16).

Survey and shovel testing in Zone 49 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 49. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-

Figure 24. *The east to west cuts on the sloping Zone 45 landform, visible in this photograph to the southwest, are likely ephemeral or former stream channels that were dry at the time of survey.*

Figure 25. *Zone 48, a linear earthen berm, is similar to the berm at the north end of Zone 35 (see Figure 14). View to the southwest.*

Figure 26. *Portion of Zone 49 bordered on the west by the railroad grade. The crew is excavating ST 184 in this view to the northeast.*

Figure 27. *A paved bike path in northern Zone 49 (from the entrance of Newcastle Beach Park north to Coal Creek Parkway) is shown in this photograph to the south. Rock gabions support the fill slope below I-405.*

related activities have greatly limited the potential for intact archaeological deposits in Zone 49. Archaeological site potential is low in Zone 49 and no further cultural resources work is recommended.

Zone 52

This fill zone is a broad, sloping terrace above the cut for the northbound lanes of I-405 (Figure 28). The western edge of the zone is an abandoned road segment and drainage gully that surrounds the adjacent park-and-ride lot. Shovel tests excavated were STs 204 through 206 (see Figure B.14). Two of the three excavated shovel tests revealed native sediments, which were capped by fill in ST 204 but not in ST 205. Native gravelly loamy sands encountered were interpreted as glacial gravelly till with compact lodgement till, formed under advancing glacial ice, capped by loose gravelly ablation till which formed after the retreat of glacial ice during the late Pleistocene (Soil Survey Staff 2015).

Survey and shovel testing in Zone 52 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present in Zone 52, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 52.

Zone 53

This fill zone is a narrow, sloping terrace above the cut for the northbound lanes of I-405 (Figure 29). The western margin of the zone adjacent to I-405 is a stormwater drainage swale. Eight shovel tests were excavated (STs 196 through 203) (see Figure B.14). Native sediments, capped by fill, were identified in four of the eight excavated shovel tests (STs 197, 198, 202, and 203). Native gravelly loamy sands encountered were interpreted as glacial gravelly till with compact lodgement till, formed under advancing glacial ice, capped by loose gravelly ablation till which formed after the retreat of glacial ice during the late Pleistocene (Soil Survey Staff 2015).

Survey and shovel testing in Zone 53 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present in Zone 53, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 53.

Zone 54

This restricted zone is a narrow, nearly level terrace above the cut for the northbound lanes of I-405. This zone is bound on the east by a perennial stream (Zone 57) and on the south by fenced residential properties. Native sediments, mapped as Holocene alluvial sandy loam (likely related to former channels of Coal Creek or its tributaries), were encountered in all five shovel tests (STs 148, 150, 155, 157, and 159) excavated in Zone 54 (see Figures B.15 and B.16).

Figure 28. *Zone 52, a broad, sloping terrace above the cut for the northbound lanes of I-405. The crew is excavating ST 205 in this view to the north.*

Figure 29. *Zone 53, a narrow, sloping terrace above the cut for the northbound lanes of I-405. The crew is excavating ST 197 in this view to the southwest.*

Survey and shovel testing in Zone 54 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 54, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 54.

Zone 57

This restricted zone is centered on a deeply incised stream cut formed by a perennial stream and includes the associated wetland abutting the elevated fill slope of I-405 (Figure 30). It is bound on the north by the I-405 northbound off-ramp to Coal Creek Parkway, and on the south by fenced residential properties. Native sediments, mapped as Holocene alluvial sandy loam, were encountered in all six shovel tests (STs 140, 142, 144, 146, 151, and 153) excavated in and adjacent to Zone 57 (see Figure B.16).

Survey and shovel testing in Zone 57 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 57, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 57.

Zone 58

This short, narrow restricted zone parallels the existing Coal Creek channel and associated wetlands (Figure 31). It is bound on the north by Coal Creek Parkway, on the east and south by the toe of the I-405 southbound lanes road fill prism, and on the west by the tracks and grade of the Northern Pacific Lake Washington Belt Line. Native sediments, mapped as Holocene alluvial sandy loam (Coal Creek), were encountered in all three shovel tests (STs 182, 190, and 191) excavated in Zone 58 (see Figure B.16).

Features of the Northern Pacific Lake Washington Belt Line, including the trestle over Coal Creek and bridges over the bike path and Lake Washington Boulevard mark the western boundary of Zone 58. Outside of the railroad features mentioned above, survey and shovel testing in Zone 58 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene sediments is present in Zone 58, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in Zone 58.

Zone 61

This fill zone is largely the elevated, paved lanes of I-405 extending north from the Coal Creek Parkway SE interchange to MP 11.30 at the north end of the I-90 interchange ramps (Figure 32). Zone 61 includes the medians and traffic islands adjacent to this segment of I-405 as well as a the location of a former WSDOT facility west of Lake Washington Boulevard beneath the westbound lanes of I-90. A single shovel test (ST 138), excavated in the extreme southwest corner of Zone 61, contained native Holocene alluvial sandy loam (Coal Creek) to a depth of 45 cmbs, with com-

Figure 30. *Zone 57 is a deeply incised stream channel formed by a perennial stream and includes the associated wetland abutting the elevated fill slope of I-405. The crew is excavating ST 142 in this view to the northeast.*

Figure 31. *Wetlands associated with Coal Creek at the north end of Zone 58. View to the south.*

Figure 32. *Elevated fill slope on the eastern edge of I-405 typical of Zone 61. View to the southwest.*

Figure 33. *Overview to the west of paved parking lot and former structure location beneath the westbound lanes of I-90 near the north end of Zone 61. This parcel has reverted back to native marshy vegetation of Mercer Slough.*

pact grey silt loam (lacustrine) sediments immediately below (see Figure B.16). The compact grey silt loam likely formed in glacial ice impounded lakes during the late Pleistocene.

Three additional shovel tests (STs 207 through 209) were excavated in the location of the former WSDOT facility (see Figure B.19). While the paved parking lot beneath the westbound lanes of I-90 remains, the former structure location in this parcel has reverted back to a the native marshy vegetation of Mercer Slough (Figure 33). Native sediments, mapped as Holocene organic muck composed of decayed vegetation, were encountered in two of the three shovel tests excavated in this vicinity before the units filled with groundwater (STs 207 and 208).
Survey and shovel testing in Zone 61 identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Holocene and Pleistocene sediments is present in in a small portion of Zone 61, the majority is capped by extensive road fill. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits within Zone 61. Archaeological site potential is low in Zone 61 and no further cultural resources work is recommended.

Zone 65

This unrestricted zone is a cut hillside surrounded by the eastbound lanes of I-90 to the north, the SE 35th Street residential neighborhood to the south, the I-90 to I-405 southbound interchange to the east, and Lake Washington Boulevard to the west. The portion of this zone to the west of the Northern Pacific Lake Washington Belt Line's steel bridge over I-90 is occupied by a large utility vault (Figure 34). Sediment compaction halted excavation before the base of compacted fill was identified in the two shovel tests (STs 180 and 189) excavated in Zone 65 (see Figure B.19).

The south end of the Northern Pacific Lake Washington Belt Line's steel bridge over I-90 is within Zone 65. Survey and shovel testing in Zone 65 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 65. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits within Zone 65. Archaeological site potential is low in Zone 65 and no further cultural resources work is recommended.

Zone 69

This fill zone is largely the paved lanes of I-405 extending north from the I-90 interchange at MP 11.30 to the north end of the project resource evaluation area at ca. MP 11.90 (Figure 35). Sediment compaction halted excavation before the base of compacted fill was identified in the three shovel tests (STs 156, 158, and 165) excavated in Zone 69 (see Figure B.20).

Survey and shovel testing in Zone 69 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 69. While it is pos-

Figure 34. *View from Lake Washington Boulevard showing an I-90 overpass to the left and the Northern Pacific Lake Washington Belt Line steel bridge crossing I-90 in Zone 65, view to the east. The utility vault is visible in the grassy area south of I-90.*

Figure 35. *Overview of Zone 69, the paved lanes of I-405 extending north from the I-90 interchange at MP 11.30 to the north end of the project resource evaluation area. The crew is excavating ST 156 in this view to the north.*

sible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits within Zone 69. Archaeological site potential is low in Zone 69 and no further cultural resources work is recommended.

Zone 71

The majority of this fill zone is a storm water retention pond with an overgrown gravel access road along the western edge (Figure 36). Zone 71 is bound on the north by the limits of the project resource evaluation area, on the east and south by the fill slope of the elevated I-405 road bed, and on the west by the fenced tracks of the Northern Pacific Lake Washington Belt Line. Sediment compaction halted excavation before the base of compacted fill was identified in the five shovel tests (STs 160, 162, 167, 169, and 171) excavated in Zone 71 (see Figure B.20).

Survey and shovel testing in Zone 71 identified no evidence of prehistoric or historic cultural materials or features. No evidence of intact sediments was identified in Zone 71. While it is possible that intact sediments are present below the fill, transportation infrastructure construction-related activities have greatly limited the potential for intact archaeological deposits within Zone 71. Archaeological site potential is low in Zone 71 and no further cultural resources work is recommended.

Lake Washington Boulevard

This portion of the resource evaluation area, extending west of the I-405 corridor from Coal Creek north to I-90 (see Figure A.4), is outside of the archaeological potential zone mapping. It comprises Lake Washington Boulevard from its intersection with the I-405 Coal Creek exit north to where it passes under I-90, and includes the spur of SE 40th Street west from the intersection with Lake Washington Boulevard. During the current investigation, it was treated as a restricted zone.

North of SE 40th Street this area borders the low lying Mercer Slough wetland (Figure 37). A total of 11 shovel tests (STs 118, 120, 122, 124, 126, 128, 129, 131, 133, 135, and 137) were excavated at the north end of this area (see Figures B.18 and B.19). Native sediments were identified below gravelly fill in seven of the excavated shovel tests. Native sediments were a compact grey silt loam (lacustrine), forming in glacial ice impounded lakes during the late Pleistocene.

The central portion of this area includes the spur of SE 40th Street west from the intersection with Lake Washington Boulevard (Figure 38). Sediment compaction halted excavation before the base of compacted fill was identified in the four shovel tests (STs 130, 132, 139, and 141) excavated along SE 40th Street (see Figure B.18).

South of SE 40th Street along Lake Washington Boulevard is occupied by a relatively new residential subdivision (Figure 39). Six shovel tests (STs 134, 136, 143, 145, 147, and 149) were

Figure 36. *Overview of Zone 71, the storm water retention pond, evident by the cattails in the center of this photograph, and overgrown gravel access road along the western edge are shown in this photograph to the northwest.*

Figure 37. *View along Lake Washington Boulevard just south of I-90. Wetlands at the margin of Mercer Slough are visible to the right in this photograph to the south.*

Figure 38. *Crew excavating shovel tests along SE 40th Street (east of the Seattle Boat Company). View to the northwest.*

Figure 39. *View along Lake Washington Boulevard from SE 40th Street. View to the south.*

excavated at the south end of this area between Lake Washington Boulevard and I-405 (see Figure B.16). Native sediments, capped by fill, were identified in four of the shovel tests. Intact sediments were gravelly loamy sands mapped as gravelly till with compact lodgement till, formed under advancing glacial ice, capped by loose gravelly ablation till which formed after the retreat of glacial ice during the late Pleistocene (Soil Survey Staff 2015).

Survey and shovel testing in the Lake Washington Boulevard/SE 40th Street area identified no evidence of prehistoric or historic cultural materials or features. While evidence of intact Pleistocene sediments is present, shovel test results demonstrate that archaeological site potential is low. No further cultural resources work is recommended in this area.

Summary

The entire 315.5 acre project resource evaluation area was surveyed for cultural resources. One historic property, a previously recorded segment of the Northern Pacific Lake Washington Belt Line, was identified in the project resource evaluation area; it is discussed below. No additional cultural resources were identified within the project resource evaluation area during survey or shovel testing. Holocene depositional settings are limited to stream channels and adjacent narrow floodplains within the Project. Mapped soils that formed in Holocene age parent materials consist of Norma sandy loam along May Creek (south of the N 44th St. exit of I-405), Bellingham silt loam near Gypsy Creek (north of the N 44th St. exit of I-405), and Briscot silt loam along Coal Creek (Coal Creek Parkway exit of I-405). With the exception of the areas identified above, most areas along the I-405 corridor consist of soils formed in glacial parent materials, where the potential for archaeological materials is generally limited to the upper one meter below the surface.

Much of the I-405 corridor is heavily disturbed as a result of construction activities, further reducing the potential for intact subsurface cultural resource materials. Survey and shovel testing did not identify prehistoric or historic cultural resources within the project resource evaluation area. No further survey or excavation is recommended.

Built Environment Survey Results

The built environment in and immediately adjacent to the resource evaluation area is dominated by modern structures, mostly residences. There is a sparse sprinkling of buildings 45 years of age or older, all houses. Nine residences were recorded (Figure 40) through the DAHP historic property inventory WISAARD database. All nine of the recorded houses have been altered, with the most common modification being the replacement of original wood sash windows with vinyl sash windows. Other changes include changes to roof or exterior wall surface cladding. Table 4 lists the eight, ineligible houses recorded (see Figure 40). See Appendix F for photographs and information regarding the eight structures recommended ineligible; all resource locations are identified in Appendix B.

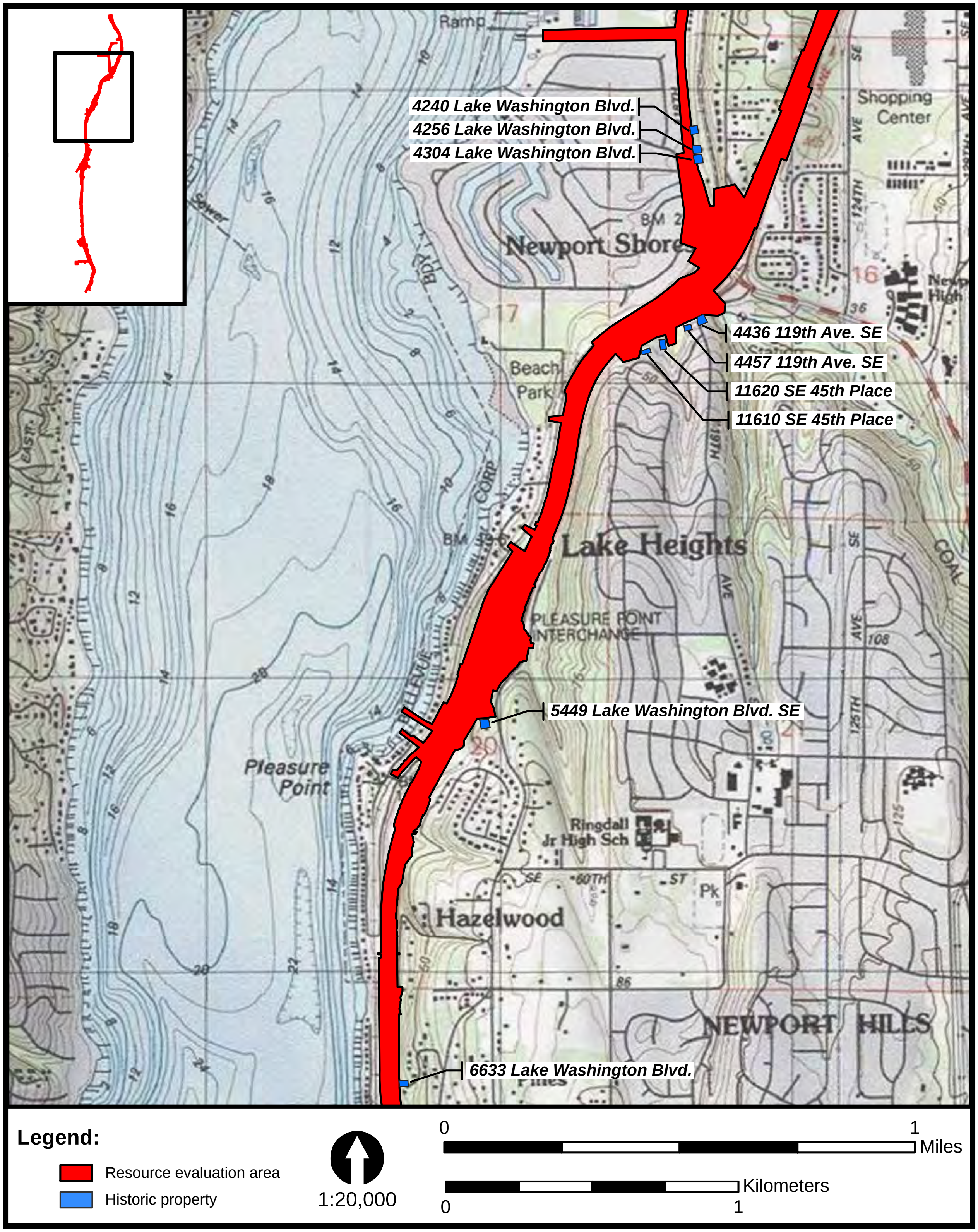


Figure 40. *Topographic map showing the location of the historic properties inventoried during survey (adapted from USGS topographic quadrangle Mercer Island, Wash.).*

Table 4. Ineligible Buildings Recorded in/adjacent to the Resource Evaluation Area.

Address	Appendix B Figure No.	Address	Appendix B Figure No.
6633 Lake Washington Blvd.	B.12	4436 119th Ave. SE	B.16
5449 Lake Washington Blvd.	B.14	4240 Lake Washington Blvd.	B.18
11610 SE 45th Place	B.16	4256 Lake Washington Blvd.	B.18
4457 119th Ave. SE	B.16	4304 Lake Washington Blvd.	B.18

Only one of the nine houses recorded is eligible and not due its architectural integrity, but to its status as an A-frame, a form that has a unique northwest history and is a rarity in these modern residential neighborhoods. The Northern Pacific Lake Washington Belt Line, which passes through the resource evaluation area, was determined eligible in 2007. The eligible residence and the railroad are discussed below.

Paukstis House, 11620 SE 45th Place

This residence is a 1 1/2-story wood frame building with a rectangular plan (Figure 41; see Figures 40 and B.16). The roof is a steeply pitched A-frame. It is covered with wood shingles and has widely overhanging, soffited eaves. A brick chimney with a rectangular cross-section emerges from the western crest of the roof. The gable faces are clad with horizontal clapboard siding. A steep roofed canopy rises above the south (front) entry, which contains a wood panel door and is accessed by wood frame ramp walkway with a flat roof. Windows are placed in the east and west gable faces, and consist of sliding vinyl sash units. Adjacent to the east is a garage, also an A-frame (Figure 42). It is front gabled instead of side gabled, with the front facing south. Like the house, the garage is clad with wood shingle roofing and clapboard siding. A narrow, vertical, vinyl sash window is placed in the front gable face, above the vehicle entry, which appears to be missing its doors.

National Register Eligibility

The A-frame was an off-shoot of the rise of vacation homes across America in the mid-twentieth century. These developments were spearheaded by designers such as Andrew Geller and John Carden Campbell, among others. At the corporate level, the advancement was championed by the Douglas Fir Plywood Association (DFPA), who elaborated on designs by amateur builder David Hellyer. The DFPA, based in Tacoma, was instrumental in marketing the A-frame across the Pacific Northwest. This house was built in 1961, when the A-frame was still a popular form, not just for vacation cabins, but for residences as well. Despite its vinyl sash windows, this house is eligible for listing in the NRHP as a relatively rare example of the A-frame house in an otherwise typical modern neighborhood.

Figure 41. *Paukstis house, 11620 SE 45th Place, south (front) and east elevations. The view is to the northwest.*

Figure 42. *Paukstis garage, 11620 SE 45th Place, south and west elevations. The view is to the northeast.*

Northern Pacific Lake Washington Belt Line

This railroad property originally extended 25 miles from Renton, at the south end, to Woodinville, at the north. The portion between Renton and I-90, much of it within the project resource evaluation area, is typical, with raised ballast beds, railroad tracks, wood or concrete overpasses (see Figure 34; Figures 43 through 45), and associated infrastructure such as signage and switches. North of I-90, the tracks and most associated features have been removed, largely leaving only the raised bed intact.

In 1970 the Burlington Northern Santa Fe Railroad (BNSF) purchased the line. In 2007, the entire line from Renton to Woodinville was recommended eligible for listing in the NRHP (Allen and O'Brien 2007). This was due to the significance of the line as a distribution artery along the east shore of Lake Washington that brought raw materials to the steel mill in Kirkland and to the main Northern Pacific line at Renton. The DAHP concurred and the line was determined eligible. Rail traffic on the line was shut down the same year. In 2007, the railroad and its associated features, in their entirety, were still intact. More recent changes of ownership and alterations to, or removal of, associated features along the line have led to revised eligibility recommendations for parts of the line. None of these recommendations, however, pertain to the portions of the line within or adjacent to the project resource evaluation area, and SHPO has not concurred with any of the ineligible recommendations.

The Port of Seattle purchased the property from the BNSF in 2009. King County, in 2013, purchased the segment of the rail line adjacent to the project resource evaluation area from the Port of Seattle. Since then, there has been ongoing discussion of turning the railroad right-of-way into a walking/bicycle trail.

Survey of the Northern Pacific Lake Washington Belt Line segment between MP 6.7 and MP 9.2 revealed the presence of a nearly intact stretch of the railroad, defined primarily by single track rails, placed on treated timber ties, and attached with tie plates, track spikes, and other hardware. The tracks are situated on massive crushed rock ballast which, along with cutting and filling the immediate landscape, allow the tracks to maintain a level path. Just south of the Lakehurst grade crossing, several hundred feet of track has been removed as part of Bald Eagle protection efforts. Much signage has been removed. The one crossing signal in the segment has been deactivated and the crossing bar removed. The more durable crossing features, such as overpasses, trestles, and grade crossings remain. North of I-90, the former Wilburton Tunnel, which allowed rail traffic to pass above I-405, was removed in 2008, leaving a gap in the route. These features are individually discussed below.

Lake Washington Boulevard Overpass (MP 9.2)

This bridge was built in 1916 (see Figure B.16). It is a 44-foot long steel box girder supported by massive poured concrete abutments at each end. The single track rails are laid directly on treated timber ties, with treated timber curbing running outside of a parallel to the rails. The words "NORTHERN PACIFIC" are painted on the west side of the box girder. A dry-stacked stone re-

Figure 43. *Northern Pacific Lake Washington Belt Line, trestle over Coal Creek in Zone 58, view to the southwest.*

Figure 44. *Northern Pacific Lake Washington Belt Line, riprap slope along railroad tracks in Zone 49, view to the southwest.*

Figure 45. *Northern Pacific Lake Washington Belt Line, trestle over Ripley Lane at the south end of Zone 35, view to the southeast.*

Figure 46. *Lake Washington Boulevard overpass, view to the north.*

taining wall is situated at the northwest corner of the abutment. At the north end of the overpass is a chain link fence and gate controlled by a battery powered electronic device (Figures 46 and 47).

Future Lake Washington Boulevard Bicycle Trail Bridge (MP 9.2)
This bridge was built in 2000, presumably as King County made tentative plans for a future bicycle trail (see Figure B.16). This feature is about 60 feet long. The single track rails are situated on treated timber ties placed on crushed rock ballast atop a concrete slab that is supported by concrete cross members on steel pilings with steel X-brace reinforcements. A grated steel pedestrian walk ways parallel both sides of the rails, cantilevered outward from the concrete slab. The walkways are protected by steel posts and railings with steel mesh walls. At the north end of the overpass is a chain link fence and gate (Figures 48 and 49).

Coal Creek Trestle (MP 9.1)
This bridge was built in 1950 as an overpass of Coal Creek (see Figure B.16). It is a 133-foot long timber trestle. The bridge deck is situated on six timber stringers supported by 10 timber bents consisting of timber uprights, cross beams and X-brace reinforcements. The rails are laid directly on timber ties situated on the stringers. Between the primary rails are two secondary rails. These are guard rails, designed to keep a derailed car from falling off the trestle. Timber curbing parallels the primary rails on the outside. A timber plank pedestrian walkway is cantilevered along the west side of the bridge deck. It is protected by steel posts and steel cable railings. At the north end the overpass is a chain link fence and gate (Figures 50 and 51).

Grade Crossing at Lake Washington Boulevard (MP 8.64)
This is a 50-foot wide grade crossing with an asphalt surface (see Figure B.15). It is accompanied by two signal gates with cantilevered light bars (lights missing) mounted on a post and automatic crossing bars (missing). Near one of the gates is a small metal utility shed with a gabled roof (Figures 52 through 54).

Grade Crossing at Bagley Lane
This is a 10-foot wide grade crossing with a pre-cast concrete surface (see Figure B.15).

Grade Crossing at Lakehurst Lane
This is an 8-foot wide grade crossing with a pre-cast concrete surface (see Figure B.14; Figure 55).

Grade Crossing at Pleasure Point Way
This is a 10-foot wide grade crossing with a pre-cast concrete surface (see Figure B.13; Figure 56).

Grade Crossing at Hazelwood Lane
This is a 9-foot wide grade crossing with a pre-cast concrete surface (see Figure B.13; Figure 57).

Figure 47. *Lake Washington Boulevard overpass deck, view to the northwest.*

Figure 48. *Future Lake Washington Boulevard bicycle trail bridge, underpass, view to the northwest.*

Figure 49. *Future Lake Washington Boulevard bicycle trail bridge, deck, view to the north.*

Figure 50. *Coal Creek trestle, view to the northwest.*

Figure 51. *Coal Creek trestle, deck, view to the northeast.*

Figure 52. *Grade crossing at Lake Washington Boulevard, view to the northeast.*

Figure 53. *Grade crossing at Lake Washington Boulevard, signal gate, view to the northeast.*

Figure 54. *Grade crossing at Lake Washington Boulevard, signal gate and utility building, view to the north.*

Figure 55. *Grade crossing at Lakehurst Lane, view to the north.*

Figure 56. *Grade crossing at Pleasure Point Way, view to the northeast.*

Figure 57. *Grade crossing at Hazelwood Lane, view to the north.*

Figure 58. *Ripley Lane trestle, underpass, view to the north.*

Ripley Lane Trestle (MP 6.7)
This timber frame trestle was built in 1967 and is 406 feet long. It crosses an unnamed creek, a private drive, and Ripley Lane (see Figure B.11). Each of 27 bents is built of upright timber pilings strengthened with timber X-brace reinforcements. Each is capped with steel I-beams that support the timber stringers upon which the timber ties are laid. The rails are laid directly on the ties. Between the primary rails are two secondary rails. These are guard rails, designed to keep a derailed car from falling off the trestle. Timber curbing parallels the primary rails on the outside. A pedestrian walkway of timber planks is cantilevered along the east side of the trestle, protected on both sides by a chain link fence. Outside of the fence is an earlier railing of steel posts connected by steel cables (Figures 58 and 59).

Former Wilburton Tunnel location (MP 11.5)
This 300-foot-long cast-in-place concrete tunnel once carried rail traffic on the Lake Washington Belt Line over I-405. The former tunnel location is north of the current Project (see Figure A.4). The tunnel was built in the 1972, during construction of the I-405 route. It was demolished in 2008, a year after rail traffic ended, to allow for the broadening of the I-405 right-of-way (Figures 60 and 61). This action created a gap in the rail bed where I-405 passes (Figure 62). Plans to close the gap with a proposed pedestrian/bicycle bridge are being formulated by King County and WSDOT.

National Register Eligibility
In 2007, the Lake Washington Belt Line was determined by SHPO to be eligible for listing in the NRHP. Most of the original route configuration and raised ballast bed remains intact, as well as many crossing features. Past modifications in the northern portion of the route, most notably the removal of rails and the Wilburton Tunnel, have not affected the eligibility of the line. Future modifications necessitated by the conversion of the route to a bicycle trail should not be considered an adverse effect, as long as the purpose of the route remains associated with transportation, and that the original configuration is maintained.

MANAGEMENT SUMMARY

Cultural resources survey for the Project identified two significant resources, the Paukstis House (11620 SE 45th Place) which is recommended NRHP eligible and the Lake Washington Belt Line which was determined eligible in 2007. The house is separated from proposed WSDOT construction activities by significant green space and, therefore, will not be impacted by proposed Project activities in any way. Thus, there will be no adverse effect to the NRHP-eligible property. The planned conversion of the Lake Washington Belt Line route to a bicycle trail is not an adverse effect, as long as the purpose of the route remains associated with transportation and the original configuration is maintained.

No archaeological materials or features were identified during survey and shovel testing within the project resource evaluation area. Extensive disturbance related to I-405 construction (i.e., massive

Figure 59. *Ripley Lane trestle, view to the southwest.*

Figure 60. *Wilburton Tunnel in 2008 prior to demolition, view to the north. Note southbound I-405 traffic beneath the overpass. (Photograph courtesy of Tom Doolittle, Doolittle Construction.)*

Figure 61. *Wilburton Tunnel demolition in 2008, the view is to the north. (Photograph courtesy of Tom Doolittle, Doolittle Construction.)*

Figure 62. *Overview of the former Wilburton Tunnel location in 2016, view to the southwest.*

cuts and fills) and limited Holocene-era sediments in the predominantly side slope resource evaluation area result in very low probability for archaeological sites. It is recommended that the Project proceed as proposed with respect to cultural resources.

In the event that potentially significant cultural materials are identified during Project activities, work should be halted in the immediate vicinity of the find and a professional archaeologist notified to assess the resource. This document should be submitted by WSDOT to the appropriate review agencies, including DAHP, and other interested parties for review and comment prior to the initiation of any land altering activities.

BACKGROUND RESEARCH

Sources Consulted

Allen, Jason, and Elizabeth O'Brien
2007 Historic Property Inventory Form for Property #88798, Northern Pacific Railway Lake Washington Beltline. Project Number 090208-55-STB, BNSF Railway Abandonment Exemption AB-6 (Sub#464x). In *Historic and Cultural Resources: Eastside Rail Corridor Regional Trail Master Plan Project*, prepared by ESA, pp. 131-138. Report prepared for King County Parks, Seattle, May 2015.

Alt, David, and Donald W. Hyndman
1995 *Northwest Exposures: A Geologic Story of the Northwest.* Mountain Press Publishing Company, Missoula.

Ballard, A.C.
1929 *Mythology of Southern Puget Sound*, Volume 3:31-150. Seattle.

Booth, Derek B.
1994 Glaciofluvial Infilling and Scour of the Puget Lowland, Washington During Ice-sheet Glaciation. *Geology* 22:695-698.

Borth, Holly
2011 *Archaeological Resources Assessment for the Proposed AT&T Project SB1738 Enatai Park, SE 27th Place, Beaux Arts, Washington*. On file, Department of Archaeology and Historic Preservation, Olympia.

Boswell, Sharon, Michele Parvey, Ann Sharley, Lorelea Hudson, and Brandy Rinck
2011 *NE 4th Street/120th Avenue NE Corridor Project, Cultural Resources Technical Report*. On file, Department of Archaeology and Historic Preservation, Olympia.

Bowden, Bradley, Leonard A. Forsman, Lynn L. Larson and Dennis E. Lewarch
1997 *Cultural Resource Assessment, Jag Development, King County, Washington.* On file, Department of Archaeology and Historic Preservation, Olympia.

Buerge, D.M.
1989 *Renton: Where the Water Took Wing*. Windsor Publications, Inc., Chatsworth, California.

Bundy, Barbara E.
2008 *Interstate 405 Corridor Survey: Phase I Interstate 5 to State Route 169 Improvements Project*. Report No. 08-23. Washington State Department of Transportation Cultural Resources Program, Olympia.

Bureau of Land Management
1865 Cadastral Survey Map of Township 24 North, Range 5 East of the Willamette Meridian. Electronic document, http://www.blm.gov/or/landrecords, accessed December 2015.

Caldbick, John
2014 Yesler, Henry L. (1810?-1892). Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&File_Id=286, accessed May16, 2016.

Castile, George Pierre (editor)
1985 *The Indians of Puget Sound: The Notebooks of Myron Eells*. University of Washington Press, Seattle and London.

Cheever, Bruce B.
1949 The Development of Railroads in the State of Washington, 1860 to 1948. Unpublished Master's Thesis, Western Washington College of Education, Bellingham.

Dailey, Tom
2003 *The Coast Salish Villages of Puget Sound*. Electronic document, http://coastsalishmap.org/start_page.htm, accessed December 2015.

Emerson, Stephen
2011 SE2421J, Bellevue Christian Church, 10808 SE 28th Street. Archisto Enterprises Letter Report dated March 30, to Adam Escalona, Adapt Engineering, Inc.

Franklin, Jerry F., and C. T. Dyrness
1988 *Natural Vegetation of Oregon and Washington*. Oregon State University Press, Corvallis.

Hetzel, Christopher, and J. Tait Elder
2015 *Sound Transit Link Operations and Maintenance Satellite Facility Historic and Archaeological Resources Technical Report*. On file, Department of Archaeology and Historic Preservation, Olympia.

HistoryLink
2008 Renton-Thumbnail History. Electronic document, http://www.historylink.org/essays/output. cfm?file_id=688, accessed July 17, 2008.

Humphres, Herbert W.
1948 SSH No. 2-A, Kennydale to Bellevue -2nd Sec. SL-99, Sta. 115+75 to Sta. P25+00. Letter Report dated July 14, from Seattle District Soils Engineer to Walter F. Winters, Seattle District Engineer. On file, Washington State Department of Transportation, Olympia.

1949a SL-99, Kennydale to Bellevue, Sec. 2, Sta. L-20+00 to Sta. 21+50, Sta.S5 22+95 to Sta. S5 23+05. Letter Report dated May 20, from Seattle District Soils Engineer to George H. Shearer, Seattle District Engineer. On file, Washington State Department of Transportation, Olympia.

1949b SSH 2-A, Kennydale to Bellevue, SL-99, Second Section, Sta. 115+75 to Sta. P25+00. Letter Report dated January 24, from Seattle District Soils Engineer to Walter F. Winters, Seattle District Engineer. On file, Washington State Department of Transportation, Olympia.

Hushour, Jennifer
2014 *Cultural Resources Assessment for the Alcove Creek Roughened Channel Project, King County, Washington*. Tierra Archaeological Report No. 2014-090. On file, Department of Archaeology and Historic Preservation, Olympia.

Jones, Jason
2015a *I-405 I-90 to Northeast 6th Street Improvements Project*. Letter Report DOT15-05. Archaeological and Historical Services, Eastern Washington University, Cheney.

2015b *I-405 SR 169 to I-90 Improvements Project*. Letter Report DOT15-06. Archaeological and Historical Services, Eastern Washington University, Cheney.

Juell, Kenneth E.
2001 *Cultural Resources Inventory of the Proposed Washington Light Lanes Project*. NWAA Report WA01-6. Northwest Archaeological Associates, Inc., Seattle.

Kanaby, Kara M., Linda Naoi Goetz, Douglas F. Tingwall and Thomas C. Rust
2009 *Archaeological Assessment, City of Renton Hawk's Landing Project, Renton, Washington.* Landau Associates, Edmonds. On file, Department of Archaeology and Historic Preservation, Olympia

King County Parks
2015 *The Eastside Rail Corridor Regional Trail Master Plan Project*. Prepared by Environmental Science Associates, Seattle. Prepared for King County Parks, Seattle.

MacIntosh, Heather M., and Walt Crowley
1999 Railroad Development in the Seattle/Puget Sound Region, 1872-1906. HistoryLink.org Essay 1683. Electronic document, http://www.historylink.org/ index.cfm?DisplayPage=output.cfm&file_id=1683, accessed May 2016.

Muckleshoot Indian Tribe
2015 Muckleshoot Indian Tribe. Electronic document, http://www.muckleshoot.nsn.us/, accessed December 2015.

Reinartz, Kay F.
1991 *Tukwila: Community at the Crossroads*. The City of Tukwila, Tukwila.

Schneider, Chandra, Katherine F. Wilson, Tom Ostrander, and Chris Lockwood
2015 *Coal Creek Trunk Bank Restoration Project, King County, Washington Cultural Resources Assessment*. Environmental Science Associates. On file, Department of Archaeology and Historic Preservation, Olympia.

Smith, Timothy, Stephen Emerson, Stan Gough, and Rebecca Stevens
2014 *Cultural Resources Survey for the Washington State Department of Transportation's I-405/SR 167 Direct Connector Project, King County, Washington*. Short Report DOT2014-04. Archaeological and Historical Services, Eastern Washington University, Cheney.

Snyder Dale E., Philip S. Gale, and Russell F. Pringle
1973 *Soil Survey of King County Area.* Soil Conservation Service, United States Department of Agriculture, in cooperation with the Washington Agricultural Experiment Station, Pullman.

Soil Survey Staff
2015 Web Soil Survey, Natural Resources Conservation Service, United States Department of Agriculture. Electronic document, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm, accessed December 15, 2015.

Stein, Alan J.
2010 Bellevue-Thumbnail History. HistoryLink File. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=313, accessed March 2016.

Stipe, Frank
2010 *Verizon Wireless SEA Bellevue Alt. 1 Cellular Tower Cultural Resources Review*. On file, Department of Archaeology and Historic Preservation, Olympia.

Suttles, Wayne, and Barbara Lane
1990 Southern Coast Salish. In *Northwest Coast*, edited by Wayne Suttles, pp. 485-502. Handbook of North American Indians, Vol. 7, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Thorson, R.M.
1980 Ice-Sheet Glaciation of the Puget Lowland, Washington, During the Vashon Stade (Late Pleistocene). *Quaternary Research* 13:303-321.

Thrush, Coll
2006 City of the Changers: Indigenous People and the Transformation of Seattle's Watersheds. *Pacific Historical Review* 75(1): 89-117.

Touchin, Jewel, and Korii Turner
2014 A *Class III Cultural Resources Survey for the Wilburton Sewer Capacity Upgrade Project in Bellevue, Washington, Project Report No. 2014-002*. On file, Department of Archaeology and Historic Preservation, Olympia.

Washington Department of Natural Resources (WADNR)
2016 Washington Interactive Geologic Map. Division of Geology and Earth Sciences. Electronic document, http://www.dnr.wa.gov/geologyportal, accessed March 2016.

Washington State Department of Transportation (WSDOT)
2005 *I-405 Bellevue Nickel Improvement Project. Geology, Soils, and Groundwater Discipline Report*. On file, Washington State Department of Transportation, Olympia.

2006 Appendix P: Historic, Cultural and Archaeological Resources Discipline Report. In *I-405 Renton to Bellevue Project SR 169 to I-90 Environmental Assessment*. Washington State Department of Transportation, Olympia. On file, Washington State Department of Transportation, Northwest Region, Seattle.

Washington State Department of Transportation (WSDOT)

2008a *Programmatic Agreement Pursuant to Section 106 of the National Historic Preservation Act of 1966 Among the Federal Highway Administration, The Washington State Historic Preservation Officer, The Washington State Department of Transportation, The Muckleshoot Indian Tribe, and the Snoqualmie Indian Tribe For Improvements to Interstate 405 (I-405) Corridor, King County and Snohomish County, Washington*. On file, Washington State Department of Transportation, Northwest Region, Seattle.

2008b I-405 Corridor Program Cultural Resources Assessment Guidelines for Compliance with Washington State Department of Transportation Policy and Section 106 of the National Historic Preservation Act, July 24, 2007. Appendix A of *Programmatic Agreement Pursuant to Section 106 of the National Historic Preservation Act of 1966 Among the Federal Highway Administration, The Washington State Historic Preservation Officer, The Washington State Department of Transportation, The Muckleshoot Indian Tribe, and the Snoqualmie Indian Tribe For Improvements to Interstate 405 (I-405) Corridor, King County and Snohomish County, Washington*. On file, Washington State Department of Transportation, Northwest Region, Seattle.

2015 Excavation Contour Map Set for the I-405 Renton to Bellevue Improvements Project, King County, Washington. On file, Washington State Department of Transportation, Northwest Region, Seattle.

Washington State Highway Commission (WSHC)

1962a Washington State Highway Commission, Department of Highways, Olympia, Washington. Final Record Notes Book No. 2 of 5 Part 3 of 3 April 24 1962 to October 24 1962. On file, Washington State Department of Transportation, Olympia.

1962b Washington State Highway Commission, Department of Highways Olympia, Washington. Final Record Notes Book No. 1 of 5 Part 2 of 2 April 24 1962 to October 24 1962. On file, Washington State Department of Transportation, Olympia.

Waterman, T.T.

2001 *Puget Sound Geography*. Reprinted. Lushootseed Press, Seattle. Originally published 1920, Manuscript No. 1864, National Anthropological Archives, Smithsonian Institution, Washington, D. C.

1922 The Geographical Names Used by the Indians of the Pacific Coast. *Geographical Review*, Vol. 12, No. 2 (Apr. 1922), pp.175-194. American Geographical Society, New York.

Appendix A

Topographic Maps

Figure A.1. *Topographic map showing the I-405: SR 169 to I-90 Improvement project and the locations of Appendix A 1:24,000 topographic maps (adapted from USGS topographic quadrangles Seattle South, Wash., Mercer Island, Wash., Issaquah, Wash., Des Moines, Wash., and Maple Valley, Wash.).*

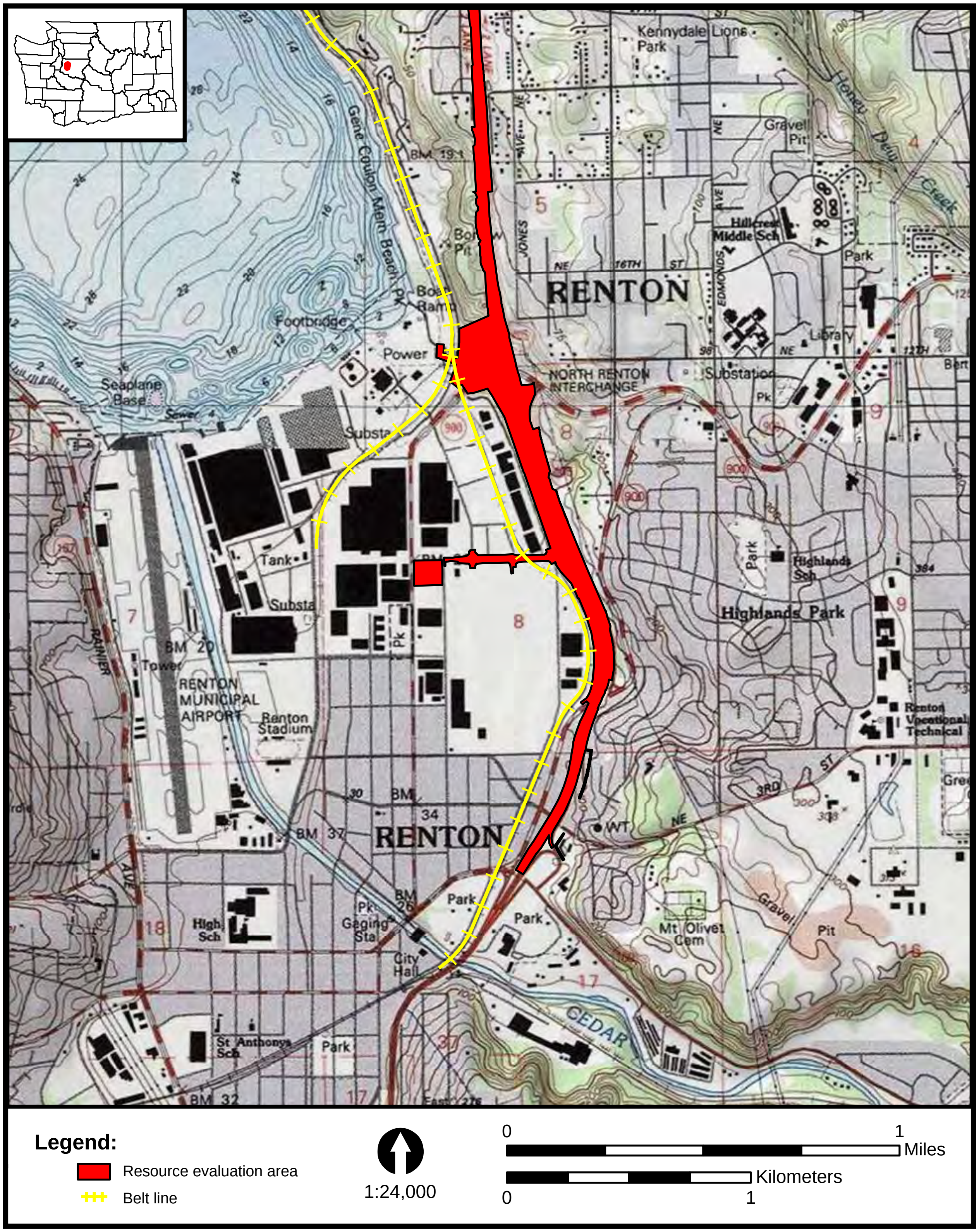


Figure A.2. *Topographic map showing the southern end of the I-405: SR 169 to I-90 Improvement project and the Northern Pacific Lake Washington Belt Line (adapted from USGS topographic quadrangles Mercer Island, Wash. and Renton, Wash.).*

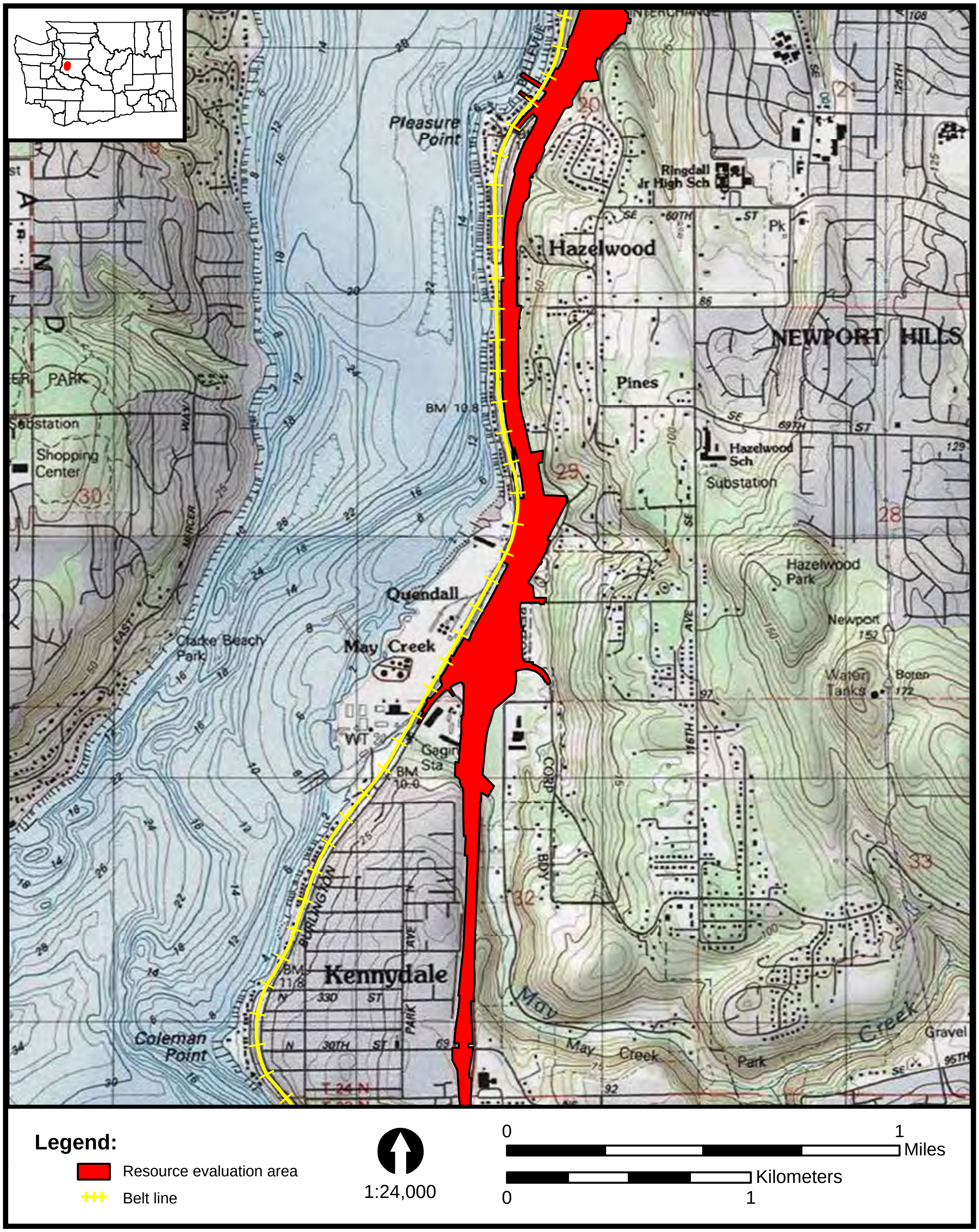


Figure A.3. *Topographic map showing the central part of the I-405: SR 169 to I-90 Improvement project and the Northern Pacific Lake Washington Belt Line (adapted from USGS topographic quadrangle Mercer Island, Wash.).*

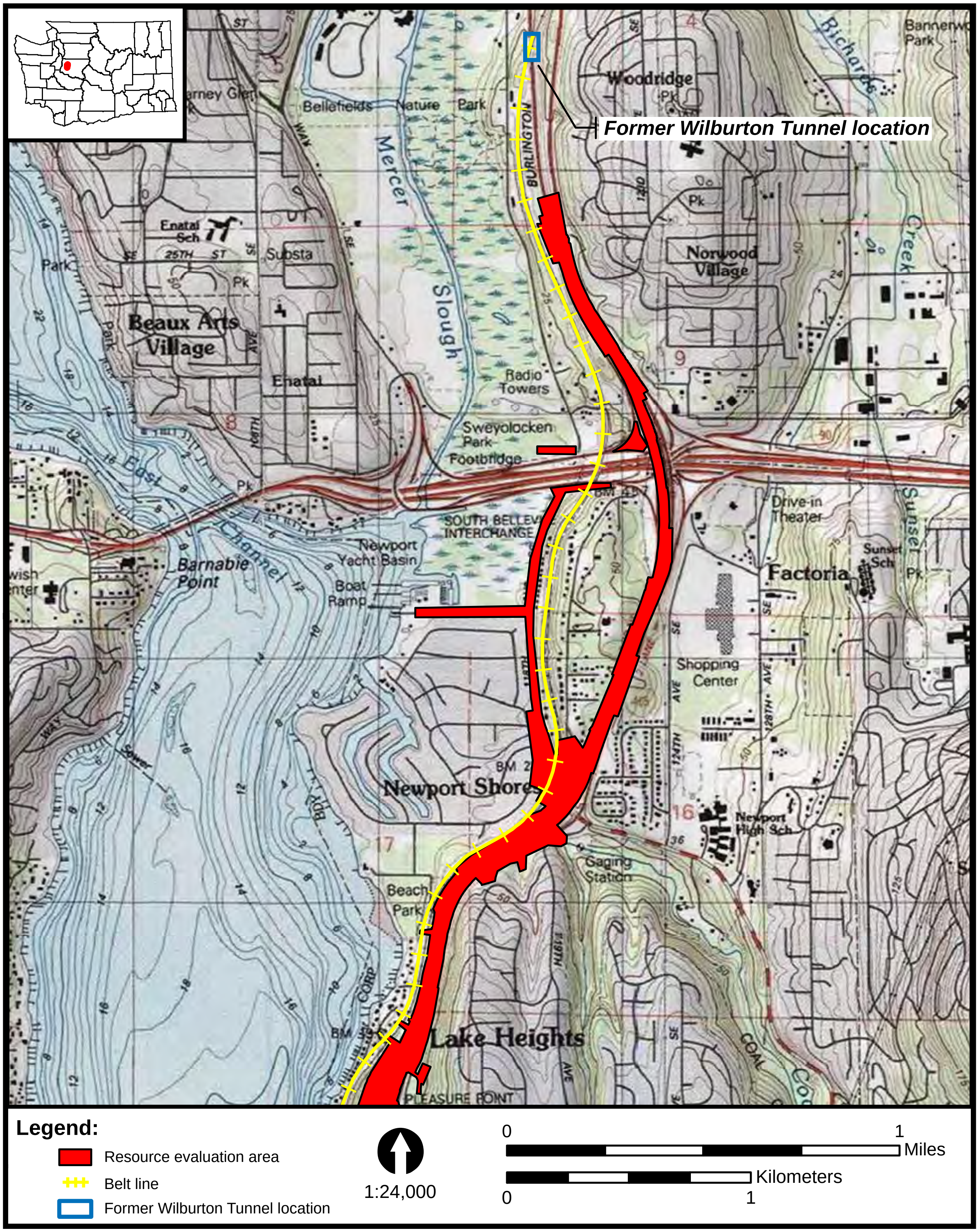


Figure A.4. *Topographic map showing the northern end of the I-405: SR 169 to I-90 Improvement project and the Northern Pacific Lake Washington Belt Line (adapted from USGS topographic quadrangle Mercer Island, Wash.).*

Appendix B

Detail Aerial Maps

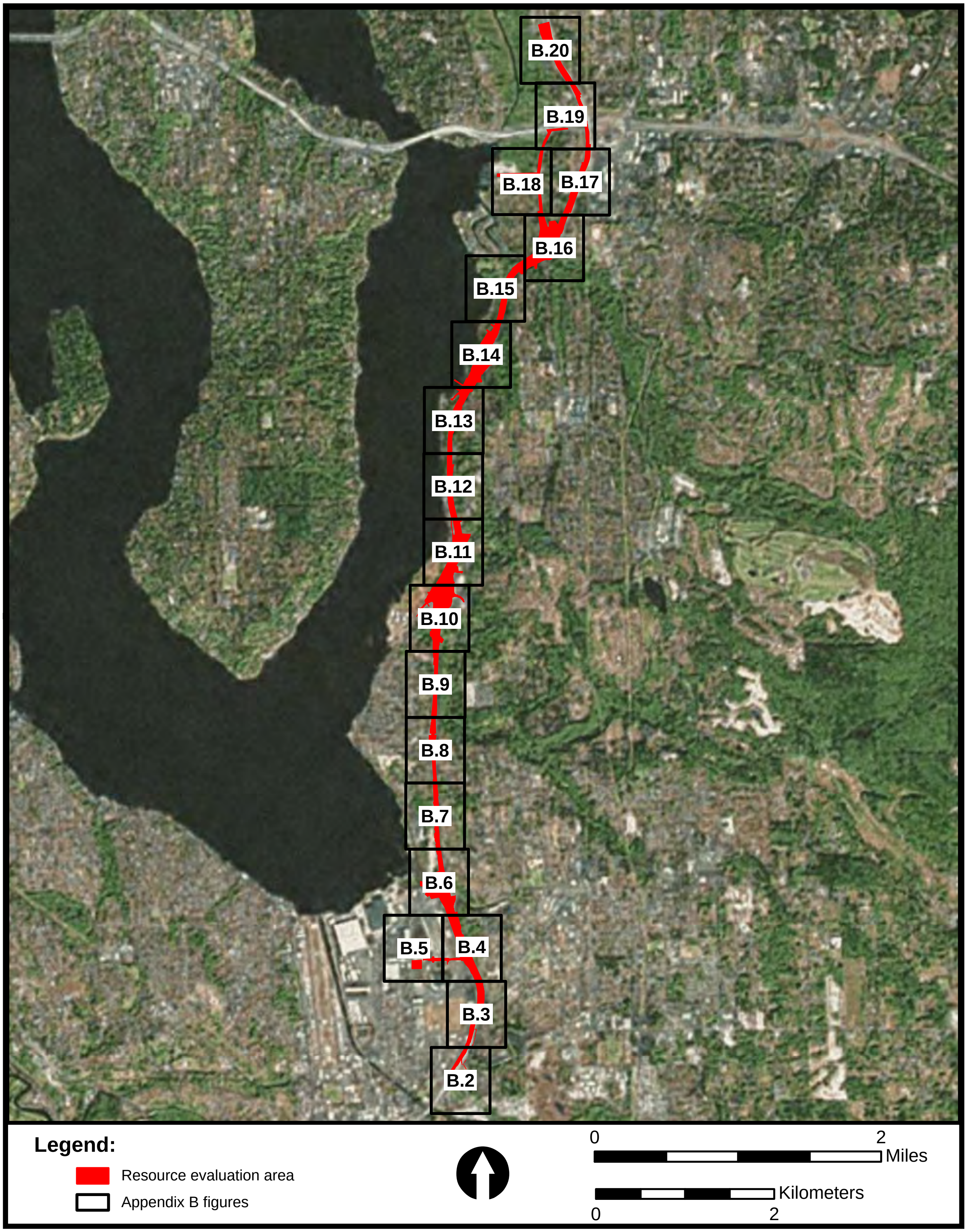


Figure B.1. *Aerial photograph showing the I-405: SR 169 to I-90 Improvement project resource evaluation area and the locations of Appendix B 1:4,000 maps.*

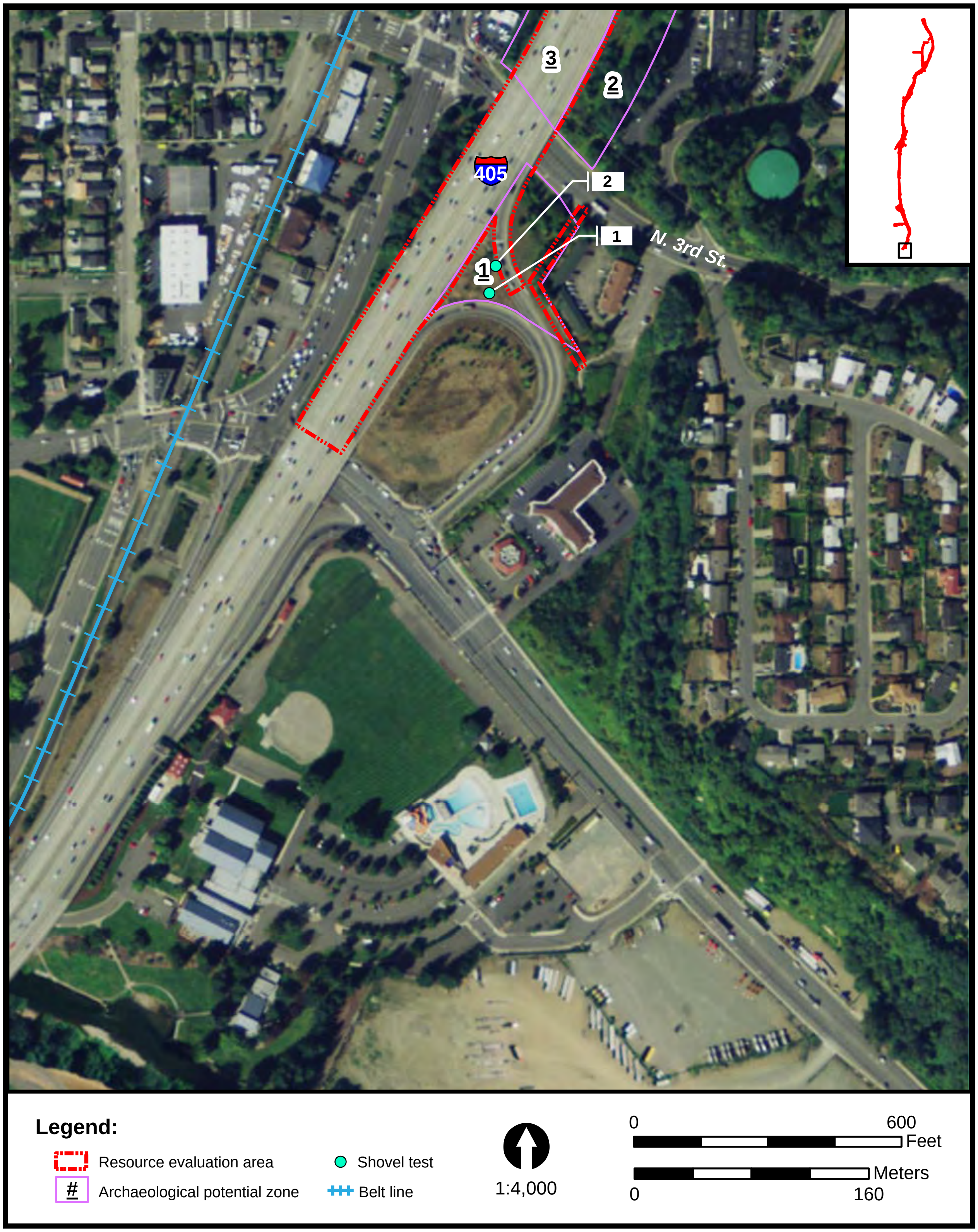


Figure B.2. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 1-3.*

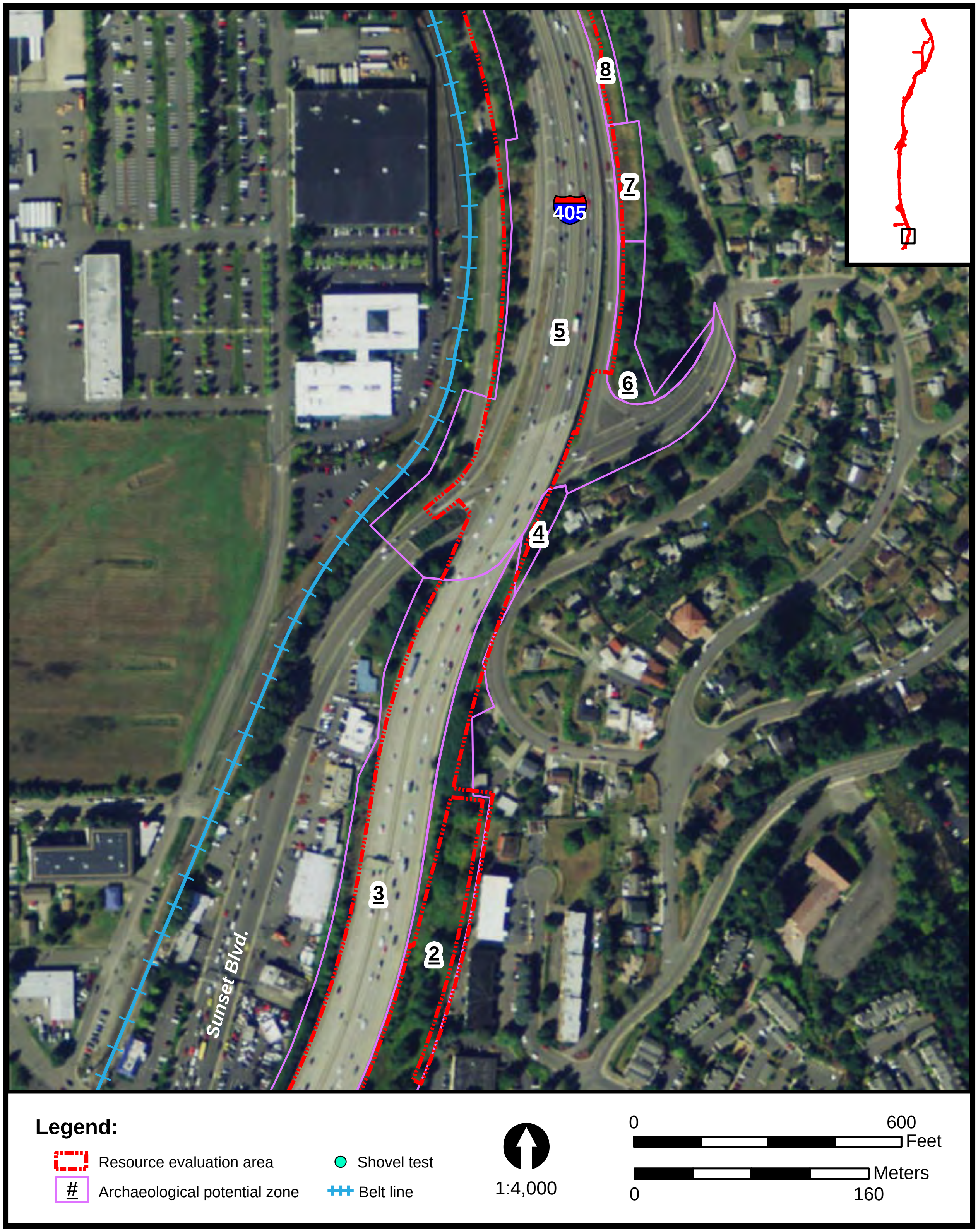


Figure B.3. *Aerial photograph detail showing the project resource evaluation area, Zones 2-8.*

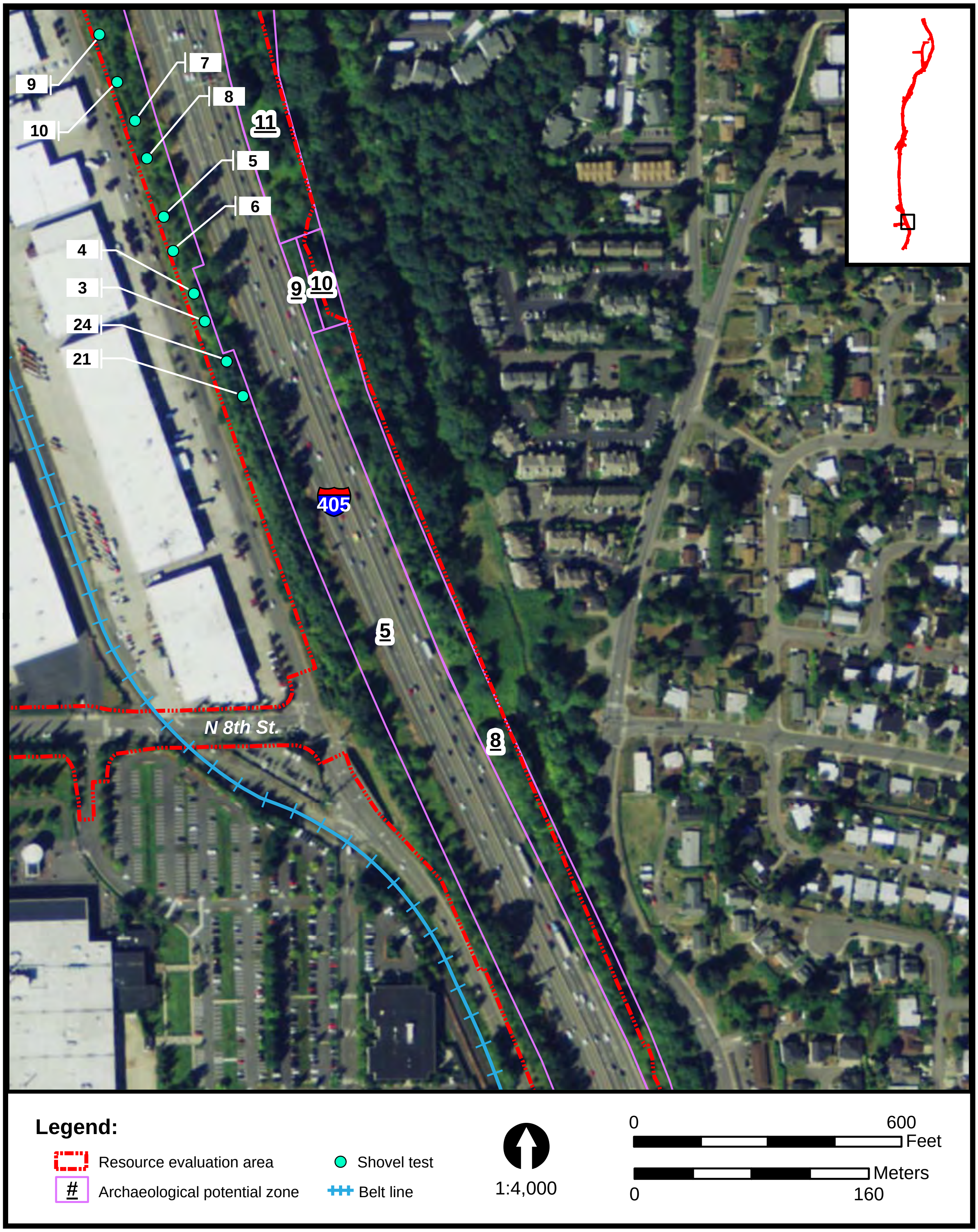


Figure B.4. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 5, 8-11.*

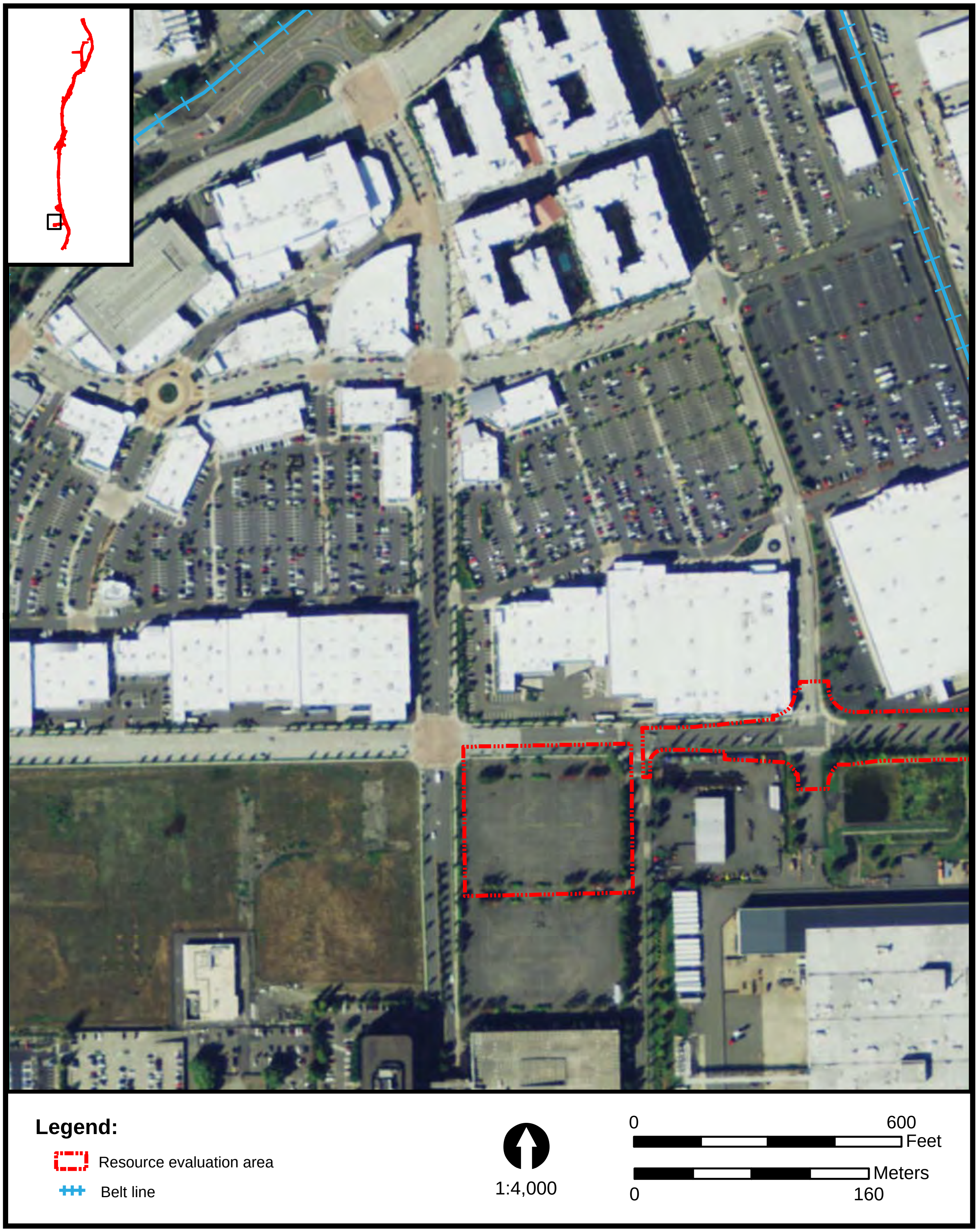


Figure B.5. *Aerial photograph detail showing a segment of the project resource evaluation area.*

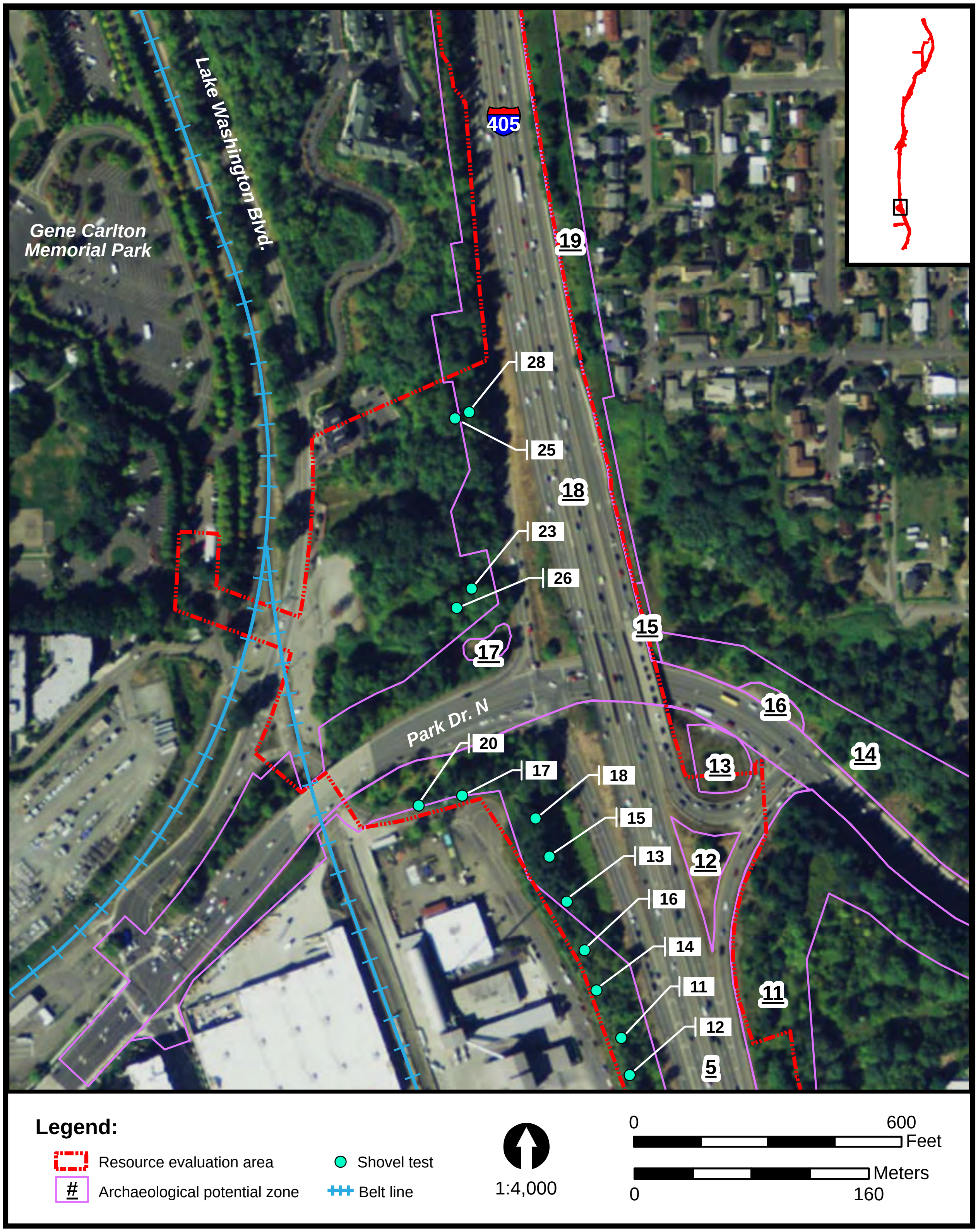


Figure B.6. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 5, 11-19.*

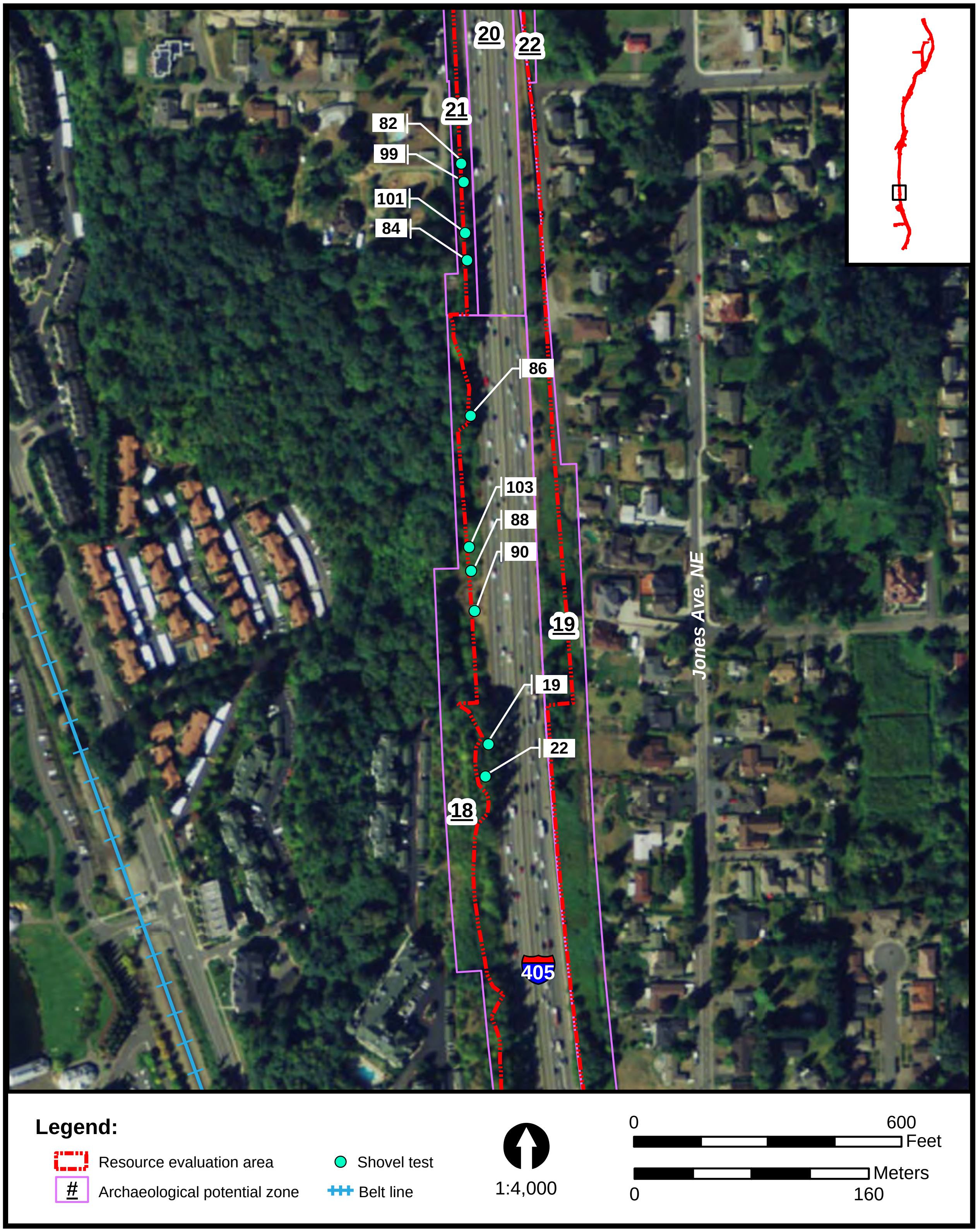


Figure B.7. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 18-22.*

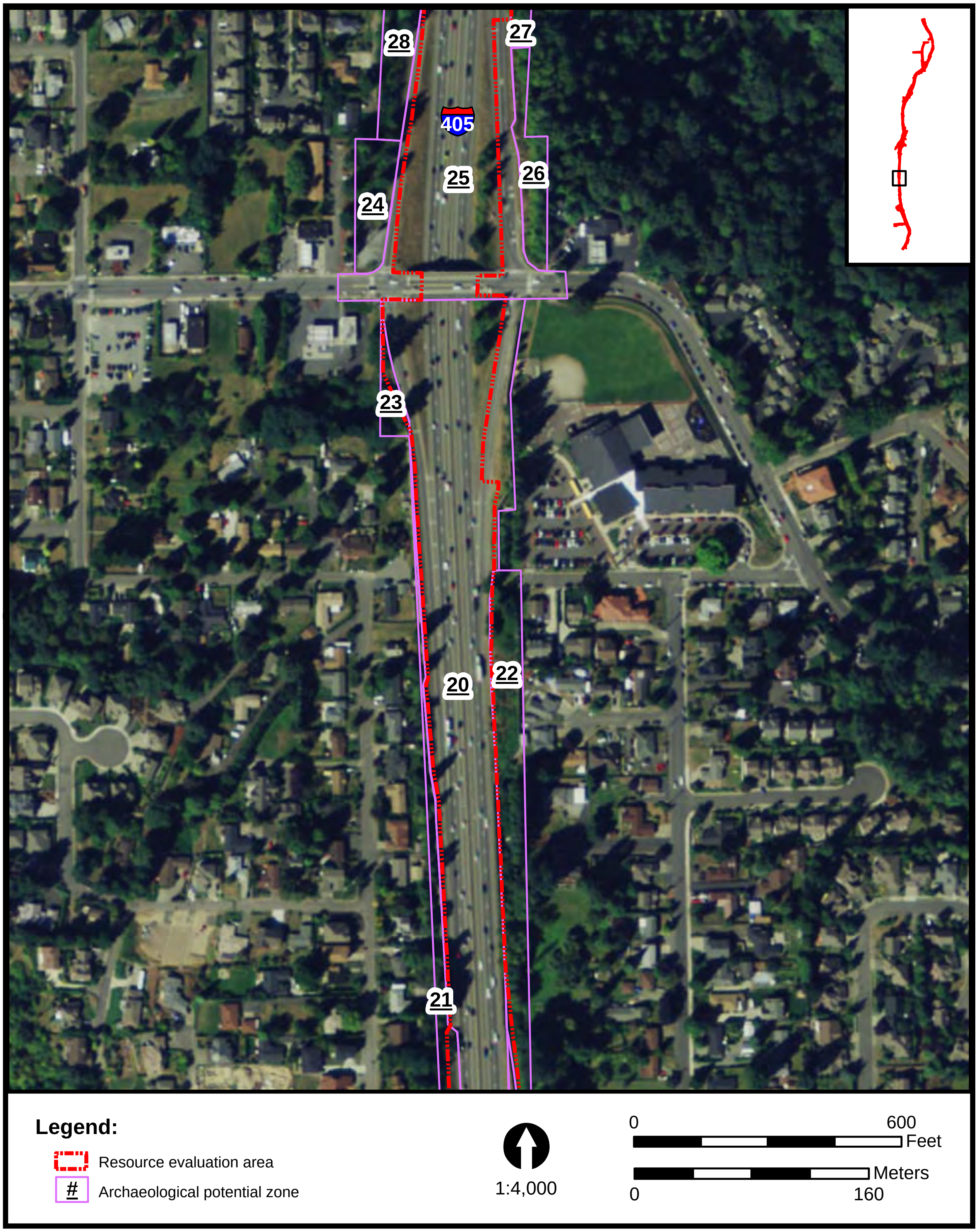


Figure B.8. *Aerial photograph detail showing a segment of the project resource evaluation area, Zones 20-28.*

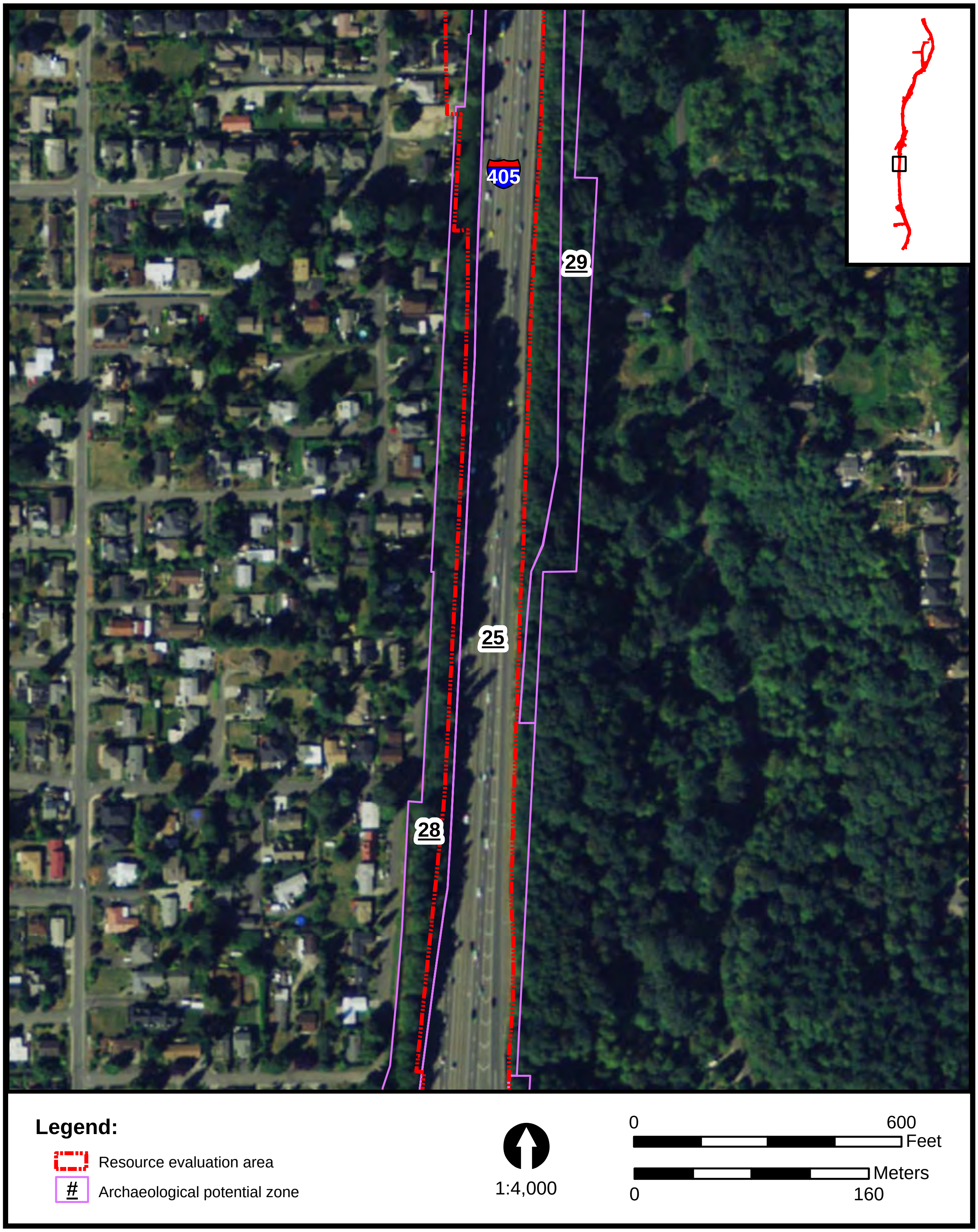


Figure B.9. *Aerial photograph detail showing a segment of the project resource evaluation area, Zones 25, 28, and 29.*

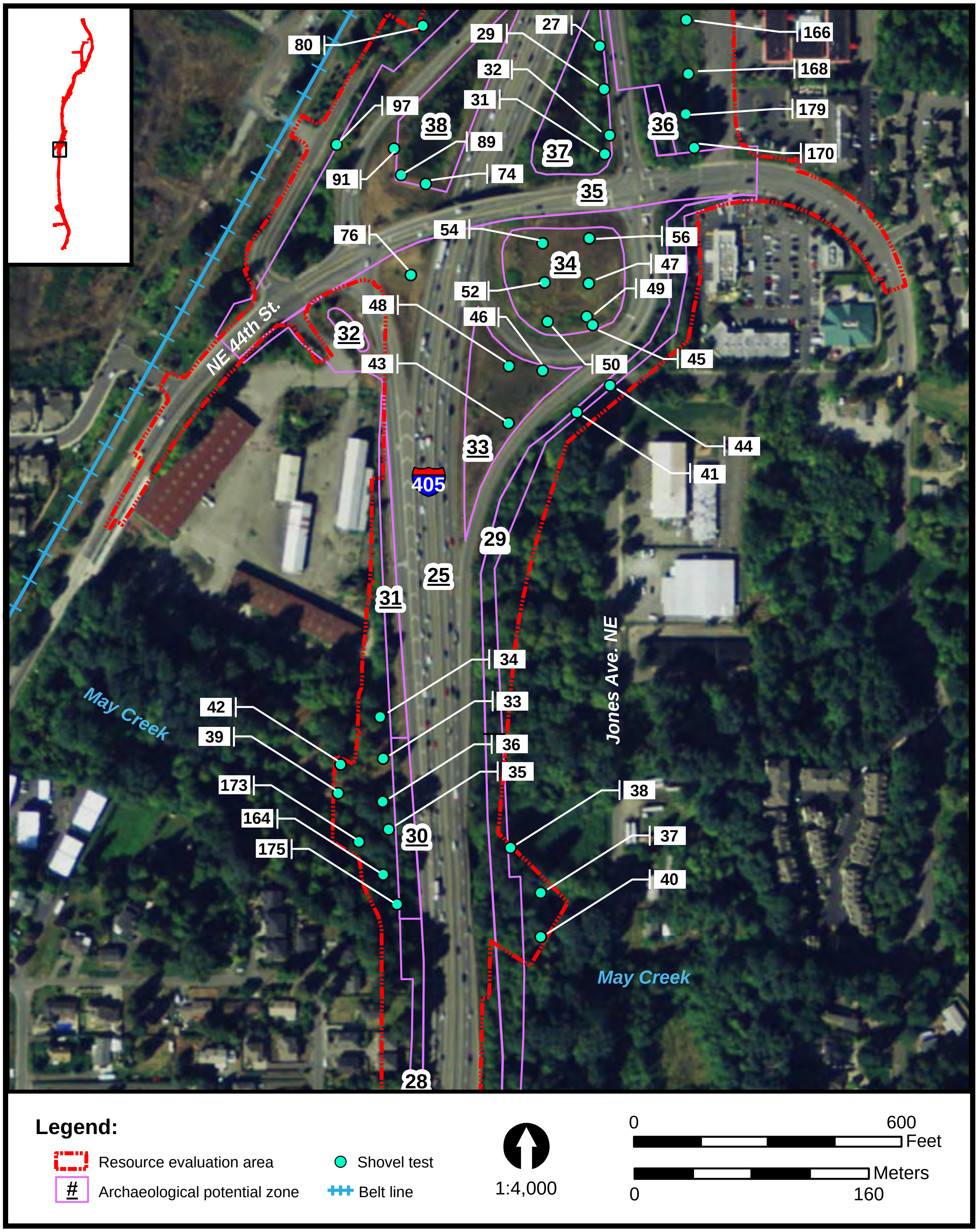


Figure B.10. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 25, and 28-38.*

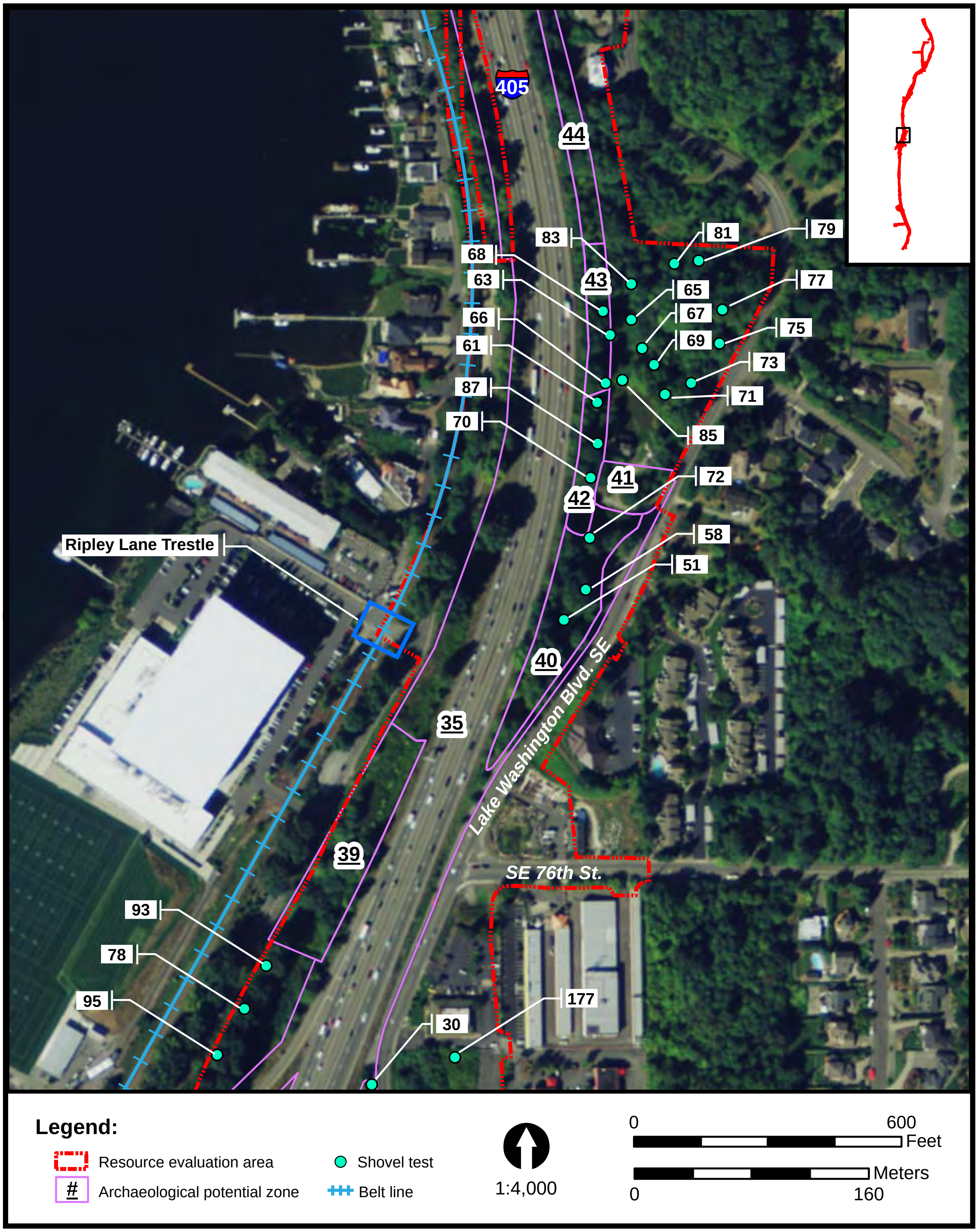


Figure B.11. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 35, 39-44.*

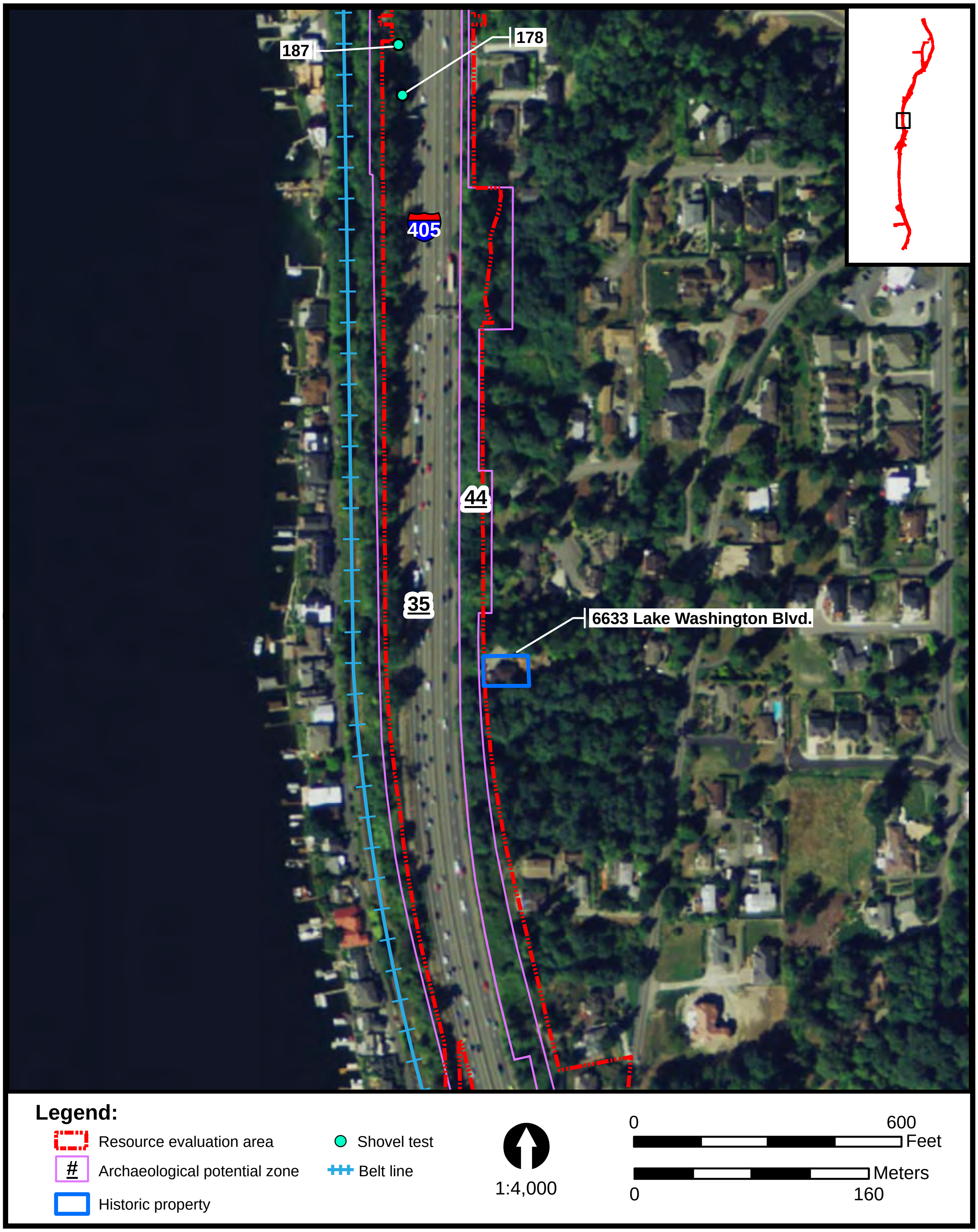


__Figure B.12.__ Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 35 and 44.

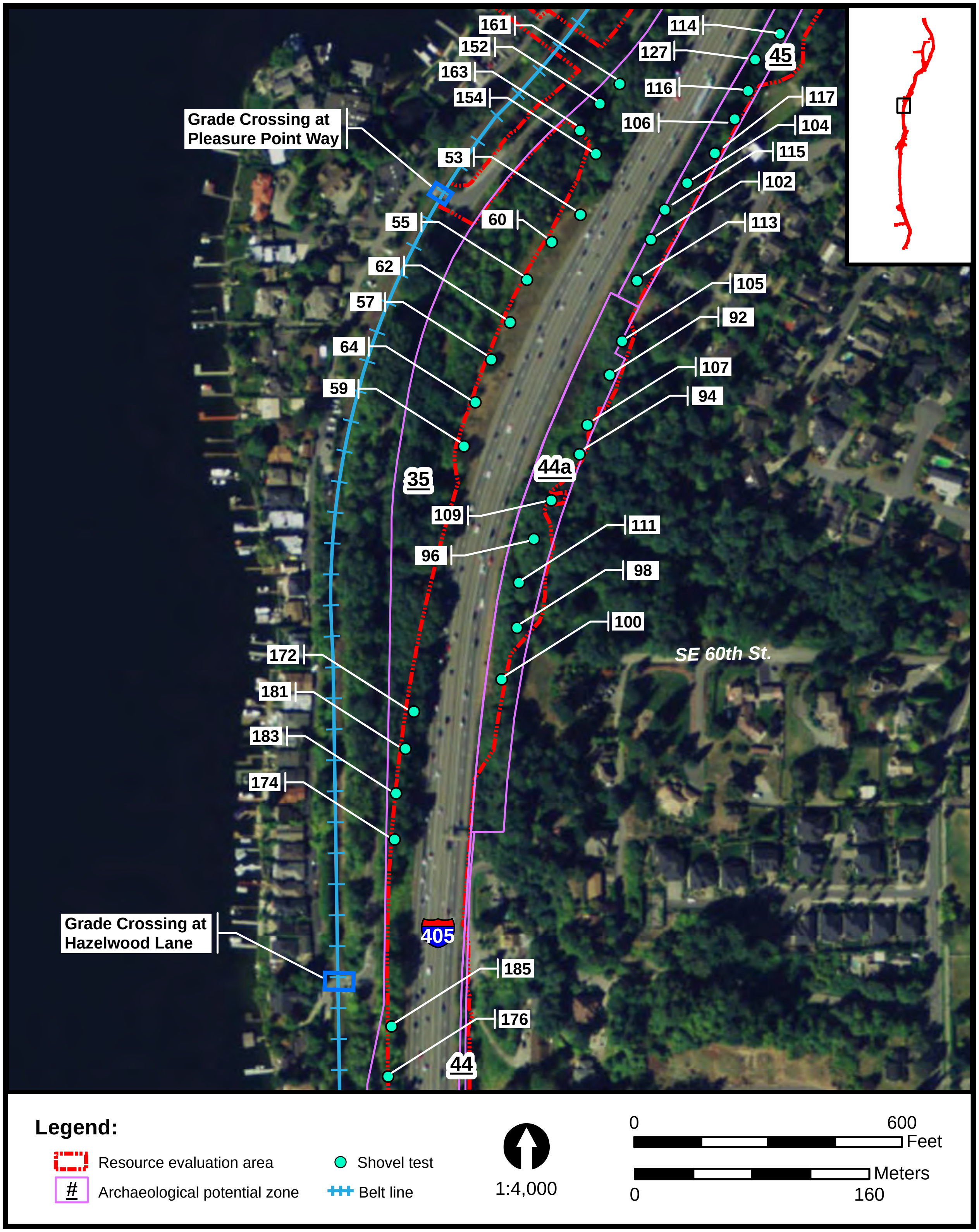


__Figure B.13.__ Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 35, 44a-45.

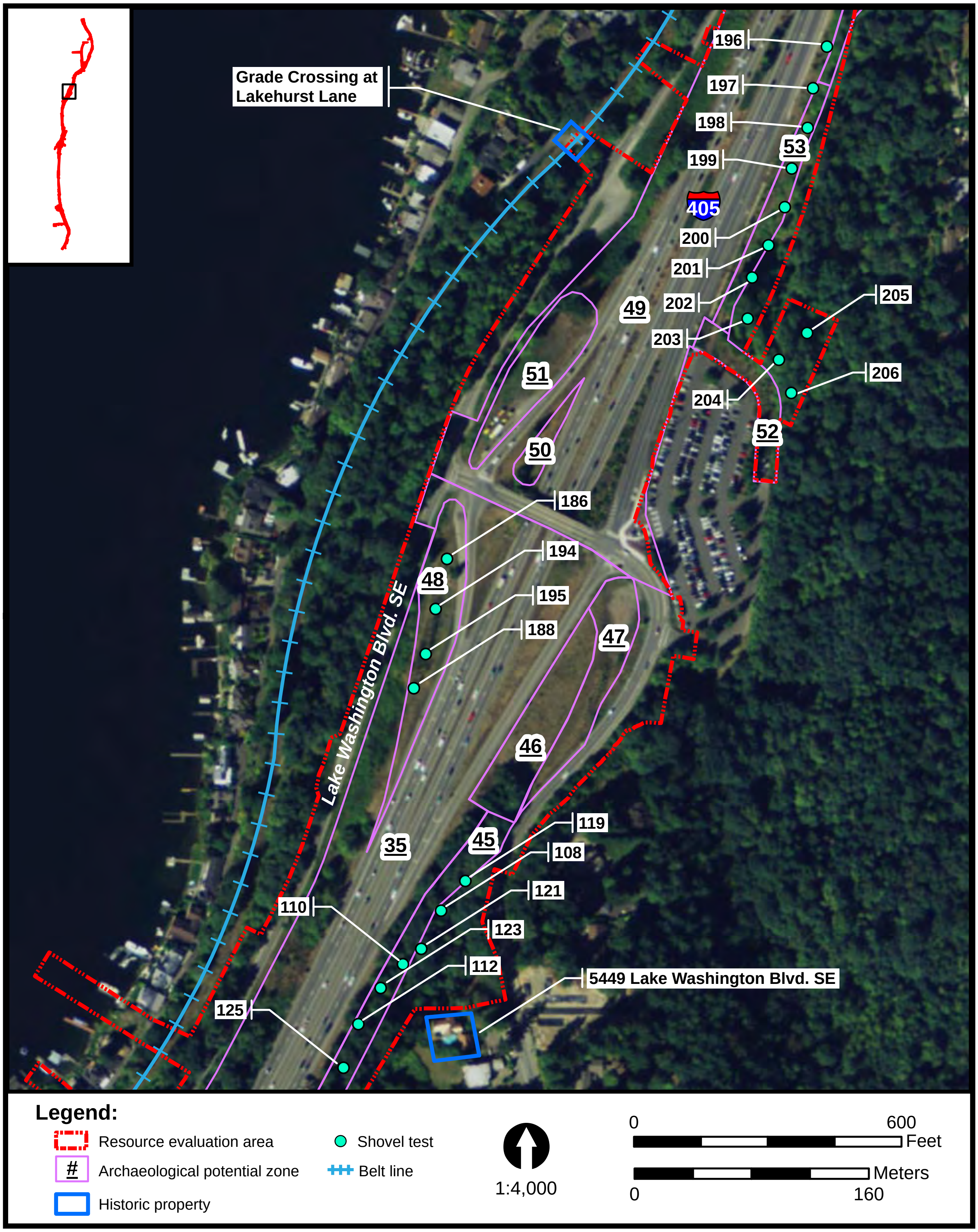


Figure B.14. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 35 and 45-54.*

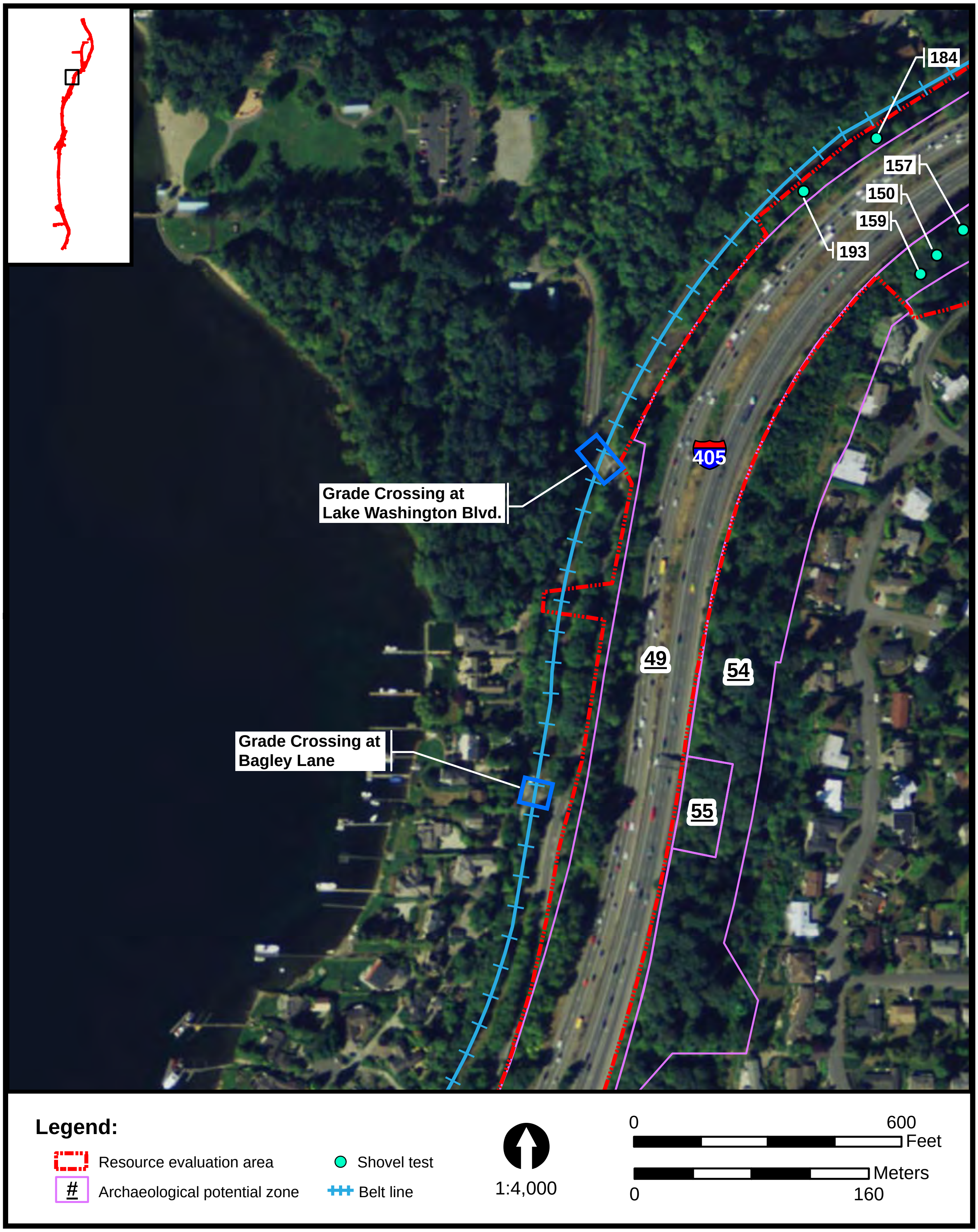


Figure B.15. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 49, 54, and 55.*

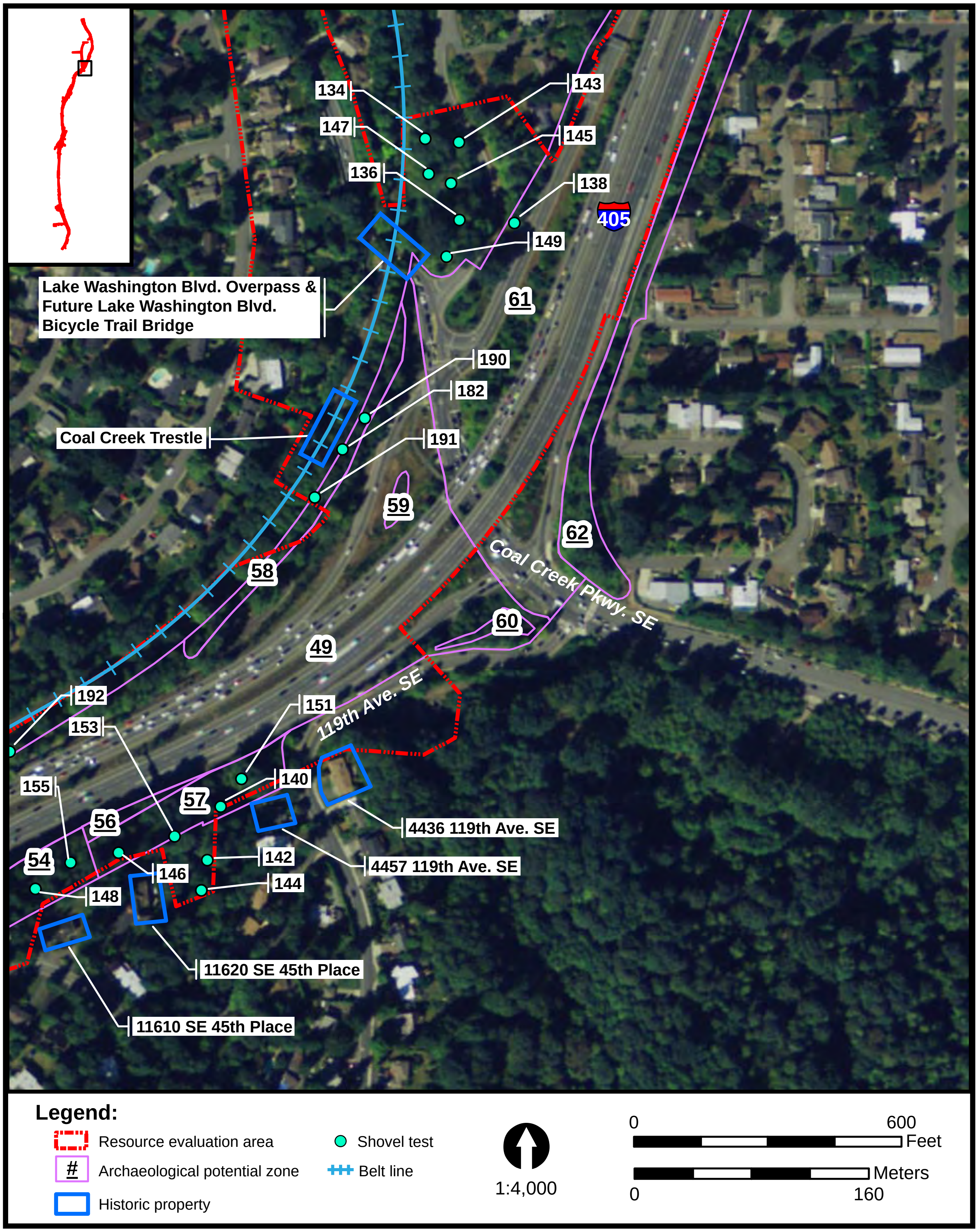


__Figure B.16.__ Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 49, 54, and 56-62.

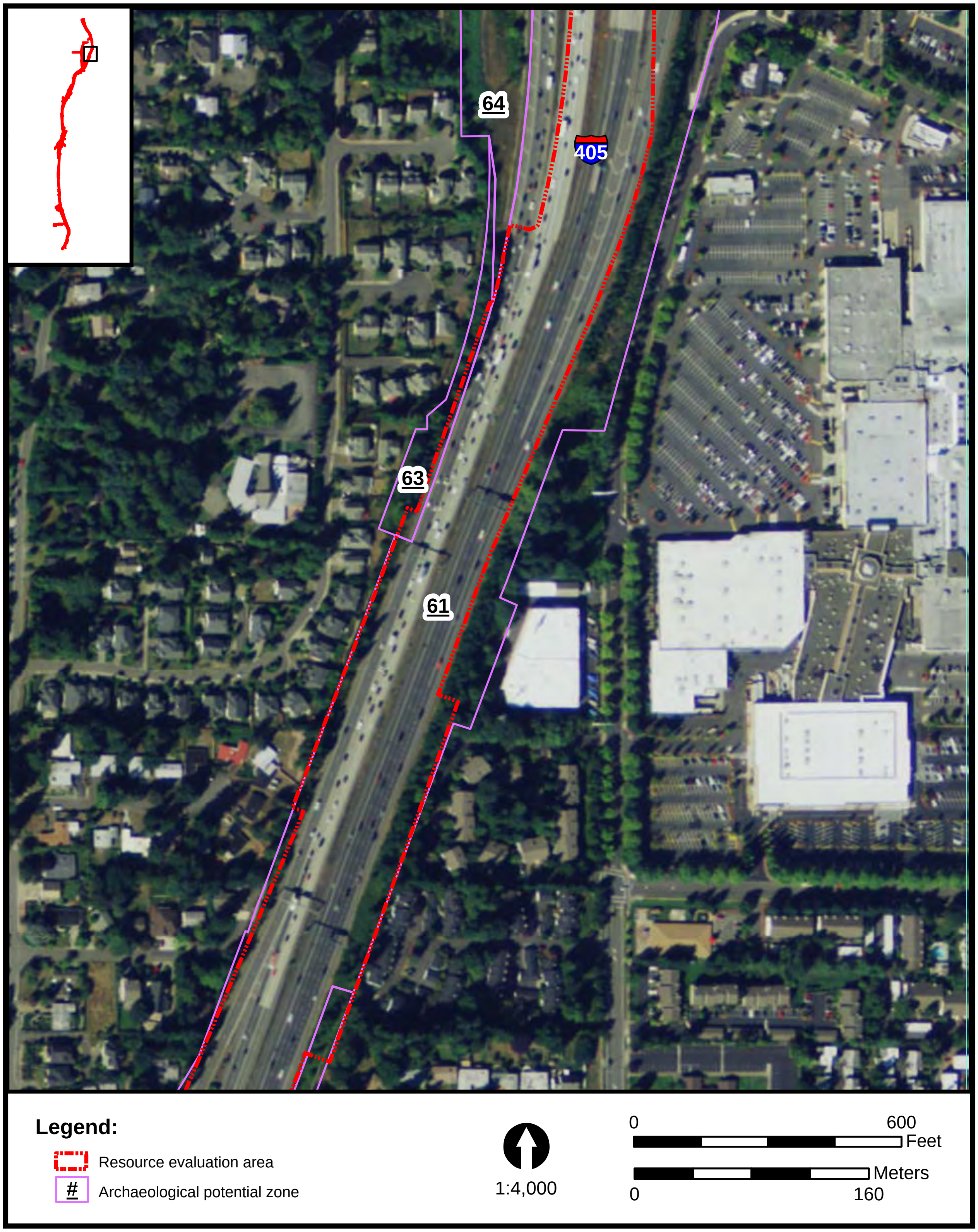


Figure B.17. *Aerial photograph detail showing a segment of the project resource evaluation area, Zones 61, 63, and 64.*

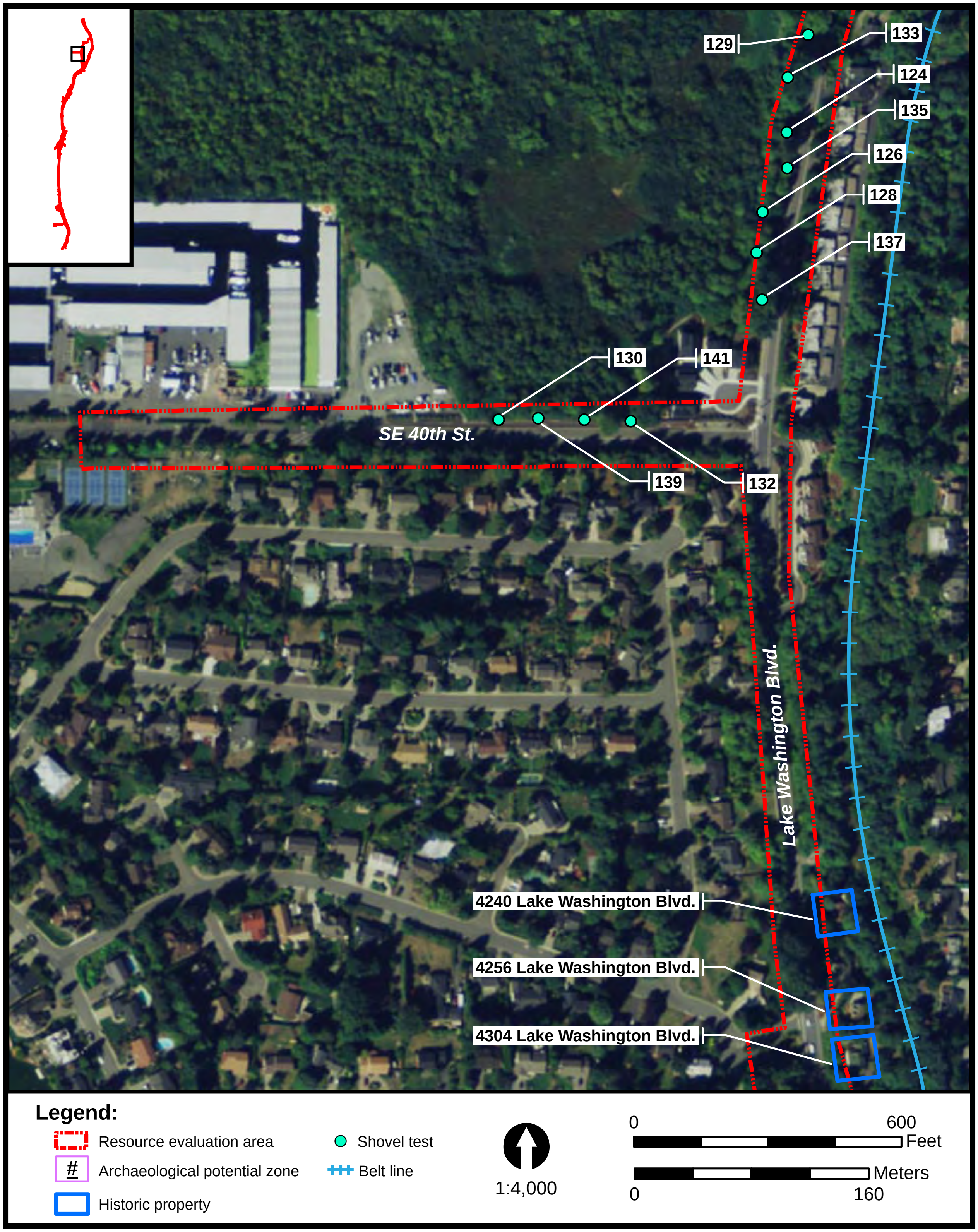


Figure B.18. Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area along Lake Washington Boulevard and SE 40th Street.

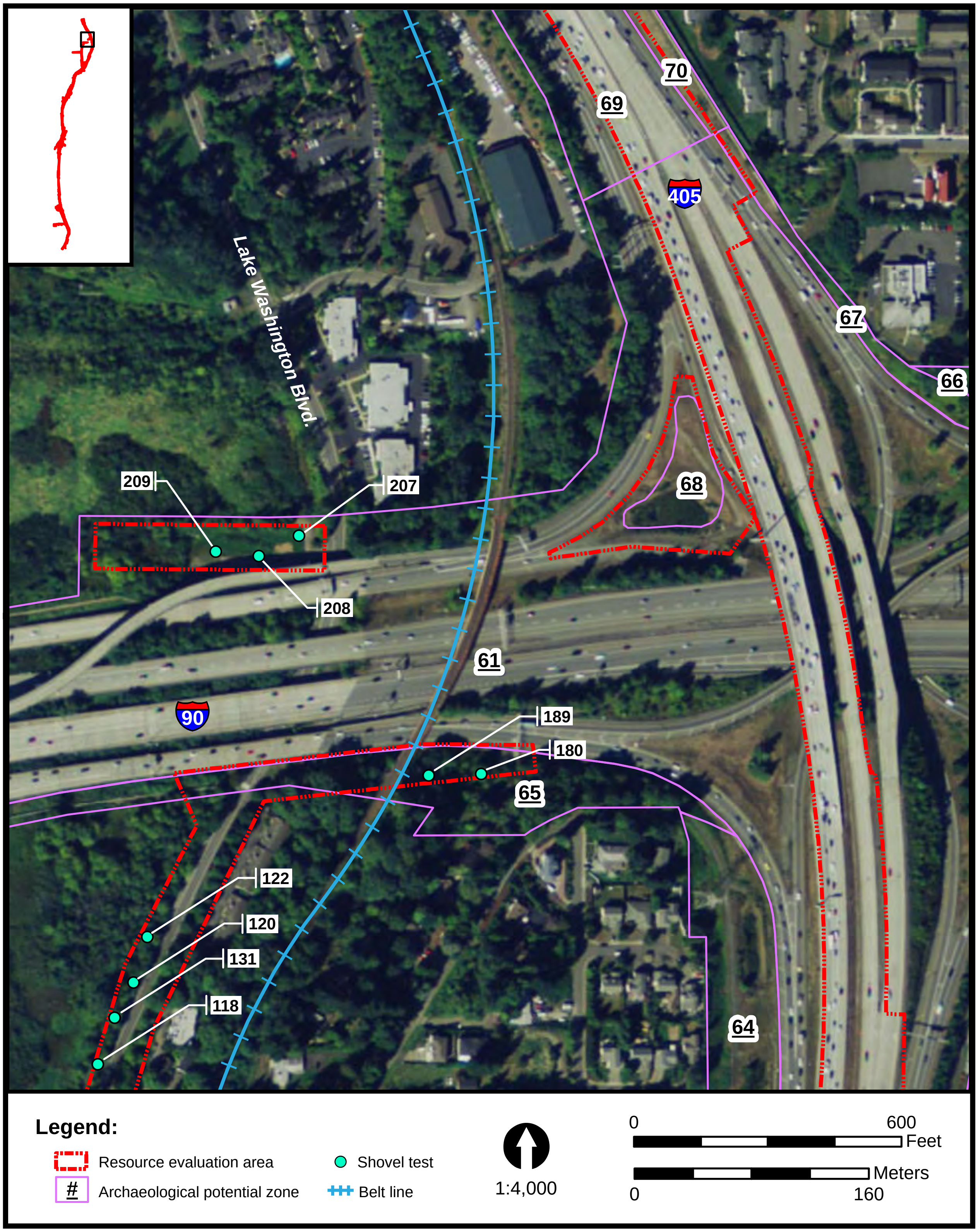


Figure B.19. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 61, and 64-70.*

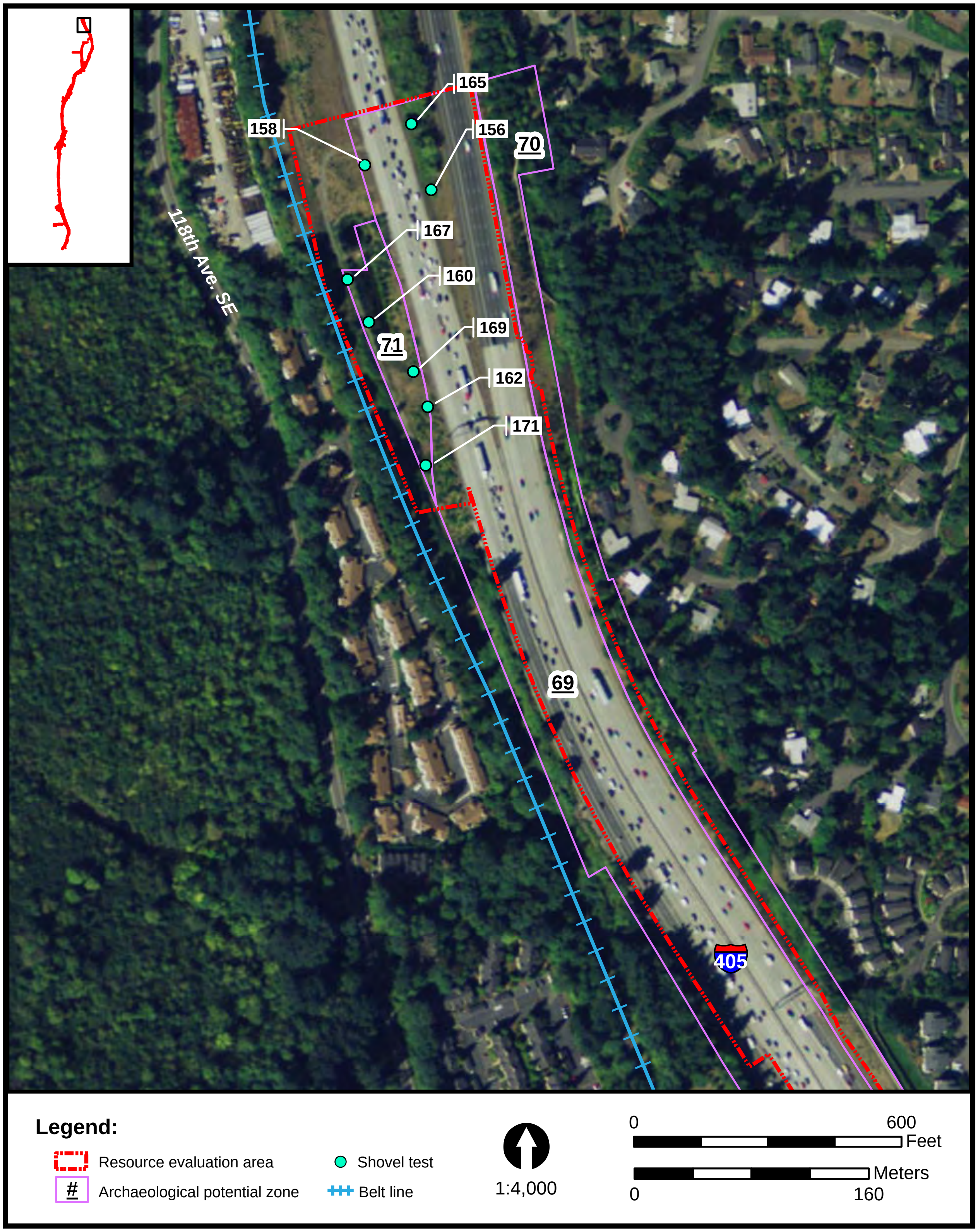


Figure B.20. *Aerial photograph detail showing the locations of excavated shovel tests in the project resource evaluation area, Zones 69-71.*

Appendix C

Shovel Test Data

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
1	1	0-37	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		37+	water			
2	1	0-58	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
3	5	0-82	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
4	5	0-37	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		37+	water			
5	5	0-41	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
6	5	0-19	gravelly sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill over silty lacustrine sediments
		19-53	compact grey alluvial silt	intact Pleistocene sediments		
7	5	0-47	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
8	5	0-34	gravelly sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill over silty lacustrine sediments
		34-43	compact grey alluvial silt	intact Pleistocene sediments		
9	5	0-35	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
10	5	0-46	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
11	5	0-76	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
12	5	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill over silty lacustrine sediments
		30-55	compact grey alluvial silt	intact Pleistocene sediments		
13	5	0-27	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
14	5	0-57	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
		57+	water			
15	5	0-35	gravelly sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill over silty lacustrine sediments
		35-37	compact grey alluvial silt	intact Pleistocene sediments		
16	5	0-42	gravelly sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill (geotextile noted ca. 30. cm) over silty lacustrine sediments
		42-47	compact grey alluvial silt	intact Pleistocene sediments		
17	5	0-10	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		10+	water	n/a		
18	5	0-25	gravelly sandy loam	fill (disturbed Pleistocene sediments)	tree roots	fill
19	18	0-72	gravelly coarse sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash
20	5	0-35	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		35+	water			fill
21	5	0-32	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
22	18	0-75	gravelly loamy sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash
23	18	0-102	gravelly loamy sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
24	5	0-39	fine sandy loam	intace holocene? Sediments	intact Pleistocene sediments	fill over silty lacustrine sediments
		39-57	compact silt	intact Pleistocene sediments		
25	18	0-24	gravelly loamy sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash
26	18	0-70	gravelly loamy sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash
27	37	0-55	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
28	18	0-47	gravelly loamy sands	intact Pleistocene sediments	intact Pleistocene sediments	sandy, recessional, stratified glacial drift/outwash
29	37	0-46	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
30	37	0-65	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
31	37	0-37	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
32	37	0-60	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
33	30	0-98	loamy sands	intact holocene sediments	cobbly alluvium	May Creek vicinity
34	31	0-26	pebbly loamy fine sand	intact holocene sediments	cobbly alluvium	May Creek vicinity
		26-50	fine sand	intact holocene sediments		
35	30	0-42	loamy sands	intact holocene sediments	cobbly alluvium	May Creek vicinity
36	30	0-19	silt loam	intact holocene sediments	cobbly alluvium	May Creek vicinity
		19-38	gravelly sandy loam	intact holocene sediments		
37	29	0-30	loamy sands	intact holocene sediments	cobbly alluvium	May Creek vicinity
		30-80	coarse sands	intact holocene sediments		
		80-90	gravelly sandy loam	intact holocene sediments		
38	29	0-18	pebbly loamy fine sand	intact holocene sediments	cobbly alluvium	May Creek vicinity
		18-50	gravelly sandy loam	intact holocene sediments		
39	30	0-66	loamy sands	intact holocene sediments	cobbly alluvium	May Creek vicinity
40	29	0-25	pebbly loamy fine sand	intact holocene sediments	cobbly alluvium	May Creek vicinity
		25-50	gravelly sandy loam	intact holocene sediments		
41	29	0-68	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	May Creek vicinity
		68+	water			
42	30	0-28	pebbly loamy fine sand	intact holocene sediments	cobbly alluvium	May Creek vicinity
		28-90	gravelly sandy loam	intact holocene sediments		
43	33	0-67	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill
44	29	0-20	gravelly sandy loam	fill (disturbed Pleistocene sediments)	concrete slab	May Creek vicinity
45	34	0-56	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
46	33	0-28	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill
		28+	water			
47	34	0-32	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill
		32+	water			
48	33	0-29	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		29+	water			
49	34	0-63	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
50	34	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		30+	water			
51	40	0-68	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
52	34	0-33	gravelly sandy loam	fill (disturbed Pleistocene sediments)	water infill	fill
		33+	water			
53	35	0-51	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
54	34	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
55	35	0-49	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
56	34	0-58	gravelly sandly loam	fill (disturbed Pleistocene sediments)	water infill	fill
		58+	water			
57	35	0-48	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
58	40	0-20	fine sandy loam	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill over silty lacustrine sediments
		20-45	compact grey alluvial silt	intact Pleistocene sediments		
59	35	0-18	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill capping intact sediments?
		18-49	compact grey alluvial silt	pleistocene sediments		
60	35	0-20	gravelly sandy loam	fill (disturbed Pleistocene sediments)	stopped on asphalt slab	fill
61	42	0-33	loamy sands	Holocene alluvium	water infill	unnamed stream alluvium
		33+	water			
62	35	0-25	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		25-48	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
63	43	0-10	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		10+	water			unnamed stream alluvium
64	35	0-43	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		43-57	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
65	43	0-24	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		24+	water			
66	43	0-40	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		40+	water			
67	43	0-25	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		25-60	loamy coarse sand			
		60+	water			
68	43	0-20	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		20+	water			
69	43	0-40	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		40-51	loamy coarse sand			
		51+	water			
70	42	0-42	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	modern debris throughout
71	43	0-18	silt loam	holocene alluvium	root	fill over silty lacustrine sediments
		18-55	grey silt loam			

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
72	40	0-30	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	modern debris throughout
73	43	0-21	loamy sands	holocene alluvium	water infill	unnamed stream alluvium
		21+	water			
74	38	0-25	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		25-55	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
75	43	0-35	loamy sand	holocene alluvium	intact Pleistocene sediments?	native sediments
		35-48	compact loamy sand	intact Pleistocene sediments?		
76	25	0-24	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		24-56	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
77	43	0-10	silt loam	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		10-35	light brown silt loam	intact Pleistocene sediments?		
78	35	0-15	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		15-38	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
79	43	0-44	silt loam	holocene alluvium	root	native sediments
80	35	0-15	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		15-55	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
81	43	0-20	silt loam	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		20-45	light brown silt loam	intact Pleistocene sediments?		
82	21	0-95	gravelly coarse sands	intact Pleistocene sediments	root	sandy, recessional, stratified glacial drift/outwash
83	43	0-25	silt loam	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		25-40	light brown silt loam	intact Pleistocene sediments?		
84	21	0-80	gravelly coarse sands	intact Pleistocene sediments	root	sandy, recessional, stratified glacial drift/outwash
85	43	0-25	loamy sands	holocene alluvium	water infill	native sediments
		25+	water			
86	18	0-22	pebbly coarse sands	fill (disturbed Pleistocene sediments)	root	fill
87	42	0-25	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments?	native sediments
		25-49	coarse sandy loam	intact Pleistocene sediments?		
88	18	0-22	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		22-28	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
89	38	0-27	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		27-48	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
90	18	0-26	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		26-32	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
91	38	0-39	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill
		39+	water			
92	44	0-17	gravelly loamy sand	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		17-62	coarse sandy loam	intact Pleistocene sediments?		
93	35	0-40	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		40-47	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
94	44	0-32	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
95	35	0-38	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		38-42	compact gravelly loamy sand	compacted fill (disturbed Pleistocene sediments)		
96	44	0-88	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
97	35	0-26	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill
		26+	water			
98	44	0-70	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
99	21	0-47	gravelly coarse sands	intact Pleistocene sediments	root	sandy, recessional, stratified glacial drift/outwash
100	44	0-50	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
101	21	0-86	gravelly coarse sands	intact Pleistocene sediments	root	sandy, recessional, stratified glacial drift/outwash
102	45	0-94	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
103	18	0-46	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
104	45	0-80	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
105	44	0-58	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
106	45	0-125	coarse sands	holocene alluvium	root	unnamed stream alluvium
107	44	0-61	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
108	45	0-75	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
109	44	0-73	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
110	45	0-96	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
111	44	0-101	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
112	45	0-85	gravelly loamy sand	pleistocene gravels?	compaction	unnamed stream alluvium
113	45	0-46	gravelly loamy sand	pleistocene gravels?	compaction	unnamed stream alluvium
114	45	0-52	coarse sands	holocene alluvium	root	unnamed stream alluvium
115	45	0-61	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
116	45	0-105	coarse sands	holocene alluvium	root	unnamed stream alluvium
117	45	0-64	gravelly loamy sand	pleistocene gravels?	compaction	unnamed stream alluvium
118	99	0-55	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill capping intact sediments?
		55-70	compact grey alluvial silt	intact Pleistocene sediments		
119	45	0-76	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
120	99	0-25	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill capping intact sediments?
		25-55	compact grey alluvial silt	intact Pleistocene sediments		
121	45	0-79	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
122	99	0-40	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill capping intact sediments?
		40-50	compact grey alluvial silt	intact Pleistocene sediments		
123	45	0-72	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
124	99	0-15	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill capping intact sediments?
		15-39	compact grey alluvial silt	intact Pleistocene sediments		
125	45	0-33	pebbly coarse sands	holocene alluvium	root	unnamed stream alluvium
126	99	0-35	gravelly loamy sand	fill (disturbed Pleistocene sediments)	water infill	fill capping intact sediments?
		35-45	compact grey alluvial silt	intact Pleistocene sediments		
127	45	0-98	coarse sands	holocene alluvium	root	unnamed stream alluvium
128	99	0-50	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact Pleistocene sediments	fill capping intact sediments?
		50-69	compact grey alluvial silt	intact Pleistocene sediments		
129	99	0-32	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
130	99	0-15	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
		15-25	gravelly coarse sand			
		25-60	black silt (contaminated with oil)			
131	99	0-80	gravelly loamy sand	fill (disturbed Pleistocene sediments)	intact sediments	fill capping intact sediments?
		80-87	compact gravelly loamy sand	intact sediments		
132	99	0-55	gravelly loamy sand	fill (disturbed Pleistocene sediments)	root	fill
133	99	0-31	gravelly loamy sand	fill (disturbed Pleistocene sediments)	root	fill
134	99	0-72	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		72-85	compact gravelly coarse sand	intact sediments		
135	99	0-47	gravelly loamy sand	fill (disturbed Pleistocene sediments)	root	fill
136	99	0-42	dark brown loamy sands	fill (disturbed Pleistocene sediments)	root	fill
137	99	0-41	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
138	61	0-45	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill over coal creek alluvium
		45-65	grey alluvial fine sand	intact sediments		
139	99	0-47	gravelly loamy sand	fill (disturbed Pleistocene sediments)	root	fill
140	57	0-8	gravelly loamy sand	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		8-30	coarse sandy loam	intact Pleistocene sediments?		
141	99	0-37	gravelly loamy sand	fill (disturbed Pleistocene sediments)	compaction	fill
142	57	0-28	gravelly loamy sand	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		28-40	coarse sandy loam	intact Pleistocene sediments?		
143	99	0-40	cobbly coarse sands	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		40-54	grey alluvial fine sand	intact sediments		
144	57	0-35	gravelly loamy sand	forest duff (developed holocene sediments)	root	native sediments

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
145	99	0-40	cobbly loamy coarse sands	fill (disturbed Pleistocene sediments)	root	fill capping intact sediments?
		40-89	cobbly coarse sands	holocene alluvium		
		89-93	grey alluvial fine sand	holocene alluvium		
146	57	0-33	gravelly loamy sand	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		33-55	coarse sandy loam	intact Pleistocene sediments?		
147	99	0-21	gravelly loamy sand	fill (disturbed Pleistocene sediments)	root	fill
148	54	0-65	loamy sands	holocene alluvium	roots	unnamed stream alluvium
149	99	0-50	cobbly coarse sands	fill (disturbed Pleistocene sediments)	compaction	intact Pleistocene sediments?
		50-69	compact cobbly coarse sands	intact Pleistocene sediments?		
150	54	0-15	loamy sands	holocene alluvium	compaction	unnamed stream alluvium
		15-57	compact cobbly coarse sands	pleistocene gravels?		
151	57	0-52	loamy sands	holocene alluvium	roots	unnamed stream alluvium
152	35	0-18	loamy sands	holocene alluvium	roots	native sediments outside of fill slope
		18-70	loamy coarse sand	holocene alluvium		
153	57	0-70	gravelly loamy sand	forest duff (developed holocene sediments)	intact Pleistocene sediments?	native sediments
		70-96	coarse sandy loam	intact Pleistocene sediments?		
154	35	0-13	loamy sands	holocene alluvium	compaction	native sediments outside of fill slope
		13-66	compact cobbly coarse sands	pleistocene gravels?		
155	54	0-45	loamy sands	holocene alluvium	compaction	intact Pleistocene sediments?
		45-98	compact cobbly coarse sands	intact pleistocene gravels?		
156	69	0-23	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	intact Pleistocene sediments?
		23-47	compact cobbly coarse sands	pleistocene gravels?		
157	54	0-67	loamy sands	holocene alluvium	roots	unnamed stream alluvium
158	69	0-15	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
		15-75	compact cobbly coarse sands	pleistocene gravels?		
159	54	0-71	loamy sands	holocene alluvium	roots	unnamed stream alluvium
160	71	1-12	crushed gravel fill	recent fill	compaction	intact Pleistocene sediments?
		12-30	cobbly coarse sands	fill (disturbed Pleistocene sediments)		
		30-33	compact cobbly coarse sands	intact Pleistocene sediments?		
161	35	0-101	loamy sands	holocene alluvium	roots	native sediments outside of fill slope
162	71	0-11	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	intact sediments?
		11-43	compact cobbly coarse sands	intact Pleistocene sediments?		
163	35	0-103	loamy sands	holocene alluvium	roots	native sediments outside of fill slope
164	30	0-28	loamy sands	intact holocene sediments		holocene May Creek alluvium
		28-76	cobbly coarse sands	reworked pleistocene gravels?		
		76-100	loose organics PEAT	holocene wetland		
165	69	0-39	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
166	36	0-25	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		25-48	compact cobbly coarse sands	intact Pleistocene sediments?		
167	71	0-34	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
168	36	0-30	cobbly coarse sands	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		30-46	compact cobbly coarse sands	intact Pleistocene sediments?		
169	71	0-61	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
170	36	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	roots	fill capping intact sediments?
171	71	0-47	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
172	35	0-43	gravelly sandy loam	fill (disturbed Pleistocene sediments)	pleistocene sediments	fill capping intact sediments?
		43-48	compact grey alluvial silt	intact Pleistocene sediments?		
173	30	0-36	loamy sands	holocene alluvium	roots	May Creek vicinity
174	35	0-23	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		23-45	compact cobbly coarse sands	intact Pleistocene sediments?		
175	30	0-87	cobbly coarse sands	intact Pleistocene sediments?	water	May Creek vicinity
176	35	0-45	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		45-57	compact cobbly coarse sands	intact Pleistocene sediments?		
177	36	0-26	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		26-38	compact cobbly coarse sands	intact Pleistocene sediments?		
178	35	0-37	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
179	36	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	Pleistocene sediments	fill capping intact sediments?
		30-45	compact grey alluvial silt	intact Pleistocene sediments?		
180	65	0-20	gravelly sandy loam	fill (disturbed Pleistocene sediments)	Pleistocene sediments	fill capping intact sediments?
		20-40	compact grey alluvial silt	intact Pleistocene sediments?		
181	35	0-36	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		36-57	compact cobbly coarse sands	intact Pleistocene sediments?		
182	58	0-23	gravelly sandy loam	holocene alluvium	roots	coal creek alluvium
		23-50	coarse sandy loam	intact Pleistocene sediments?		
183	35	0-15	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		15-45	compact cobbly coarse sands	intact Pleistocene sediments?		
184	49	0-46	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
185	35	0-44	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		44-67	compact cobbly coarse sands	intact Pleistocene sediments?		
186	48	0-45	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction/water	fill
187	35	0-21	gravelly sandy loam	fill (disturbed Pleistocene sediments)	Pleistocene sediments	fill capping intact sediments?
		21-48	compact grey alluvial silt	pleistocene sediments		
188	48	0-35	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
189	65	0-35	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments?
		35-52	compact cobbly coarse sands	intact Pleistocene sediments?		
190	58	0-48	gravelly sandy loam	holocene alluvium	roots	coal creek alluvium
191	58	0-45	gravelly sandy loam	holocene alluvium	roots	coal creek alluvium
192	49	0-37	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
193	49	0-30	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
194	48	0-51	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction/water	fill
195	48	0-32	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill

Table C.1. Shovel Test Data.

Test No.	Zone	Depth (cmbs)	Sediment Description	Interpretation	Termination	Comments
196	53	0-62	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
197	53	0-17	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments
		17-51	compact cobbly coarse sands	intact Pleistocene sediments?		
198	53	0-11	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments
		11-43	compact cobbly coarse sands	intact Pleistocene sediments?		
199	53	0-52	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
200	53	0-57	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
201	53	0-46	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
202	53	0-22	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments
		22-44	compact cobbly coarse sands	intact Pleistocene sediments?		
203	53	0-15	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments
		15-47	compact cobbly coarse sands	intact Pleistocene sediments?		
204	52	0-18	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill capping intact sediments
		18-53	compact cobbly coarse sands	intact Pleistocene sediments?		
205	52	0-55	gravelly sandy loam	intact Pleistocene sediments?	compaction	native sediments
206	52	0-52	gravelly sandy loam	fill (disturbed Pleistocene sediments)	compaction	fill
207	61	0-12	organic muck	recent sediments	water infill	fill capping intact sediments
		12-15	gravelly coarse sands	fill (disturbed holocene sediments)		
		15-38	organic muck	intact Historic/Holocene sediments?		
		38-65	gravelly silt loam	intact Holocene sediments?		
208	61	0-22	organic muck	intact Historic/Holocene sediments?	water infill	fill capping intact sediments
		22-42	gravelly silt loam	intact Holocene sediments?		
209	61	0-22	crushed gravel fill	modern fill	water infill	fill

Appendix D

Shovel Test Profile Drawings

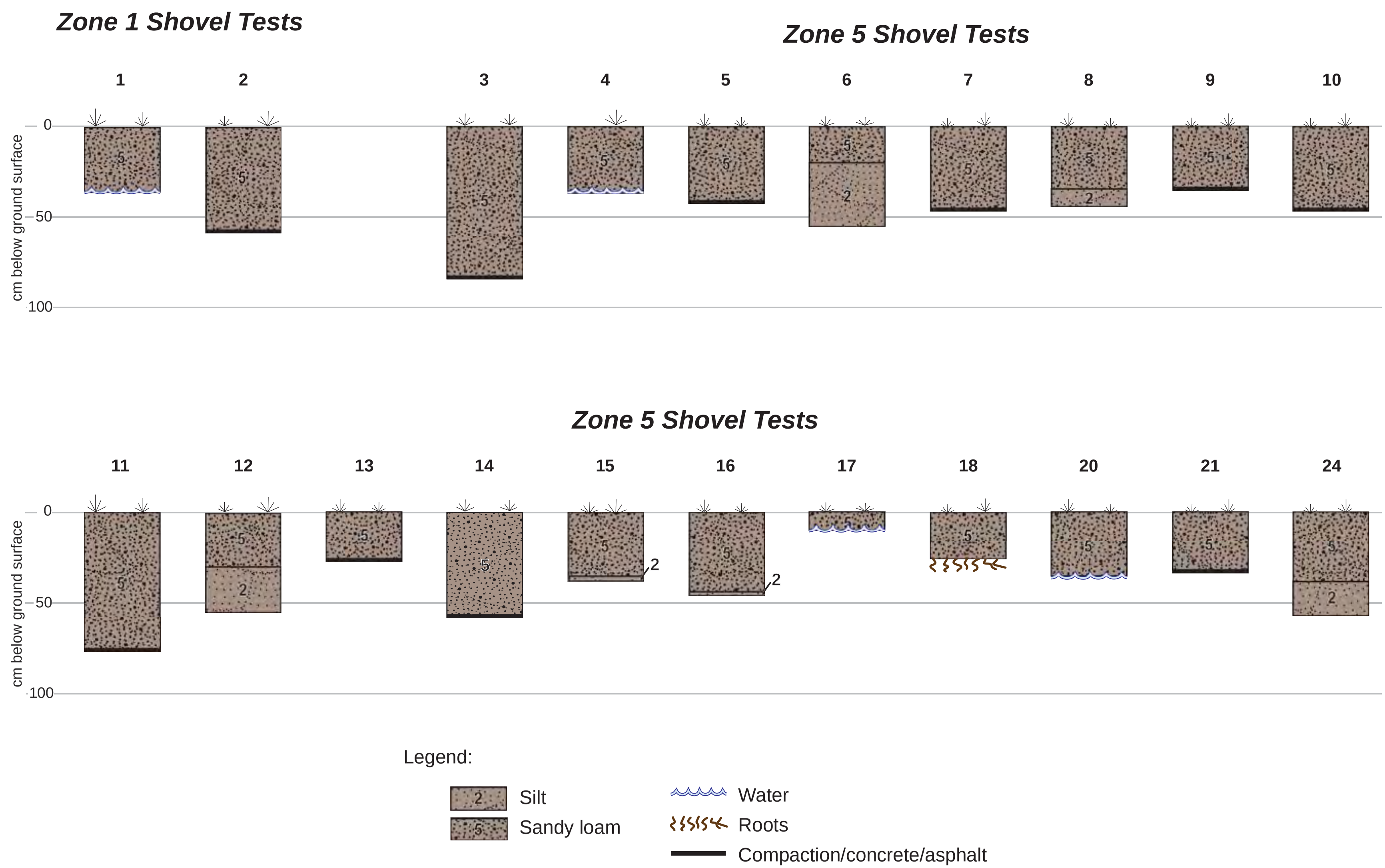


Figure D.1. *Profile drawings of shovel tests excavated in Zones 1 and 5.*

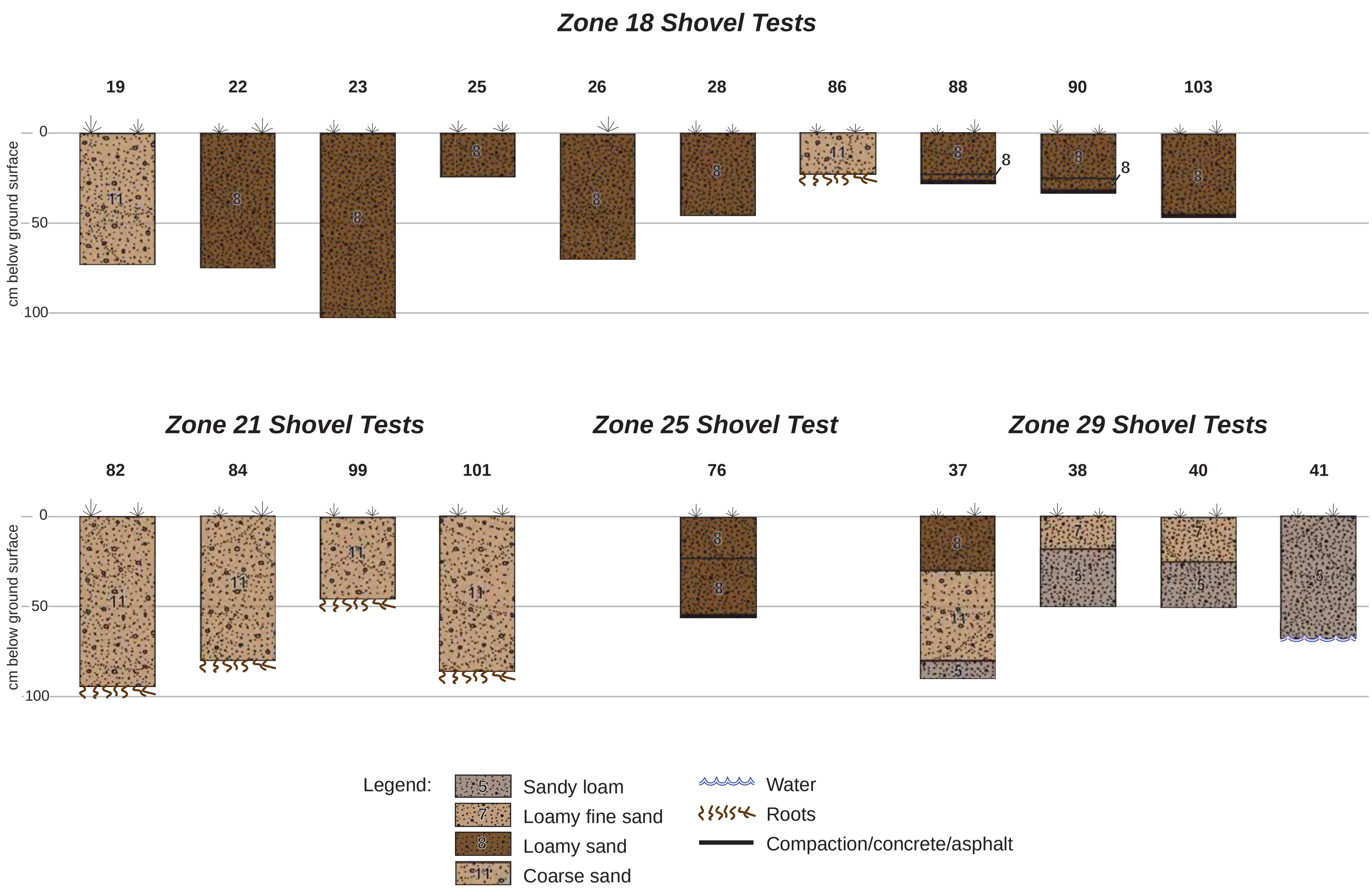


Figure D.2. *Profile drawings of shovel tests excavated in Zones 18, 21, 25, and 29.*

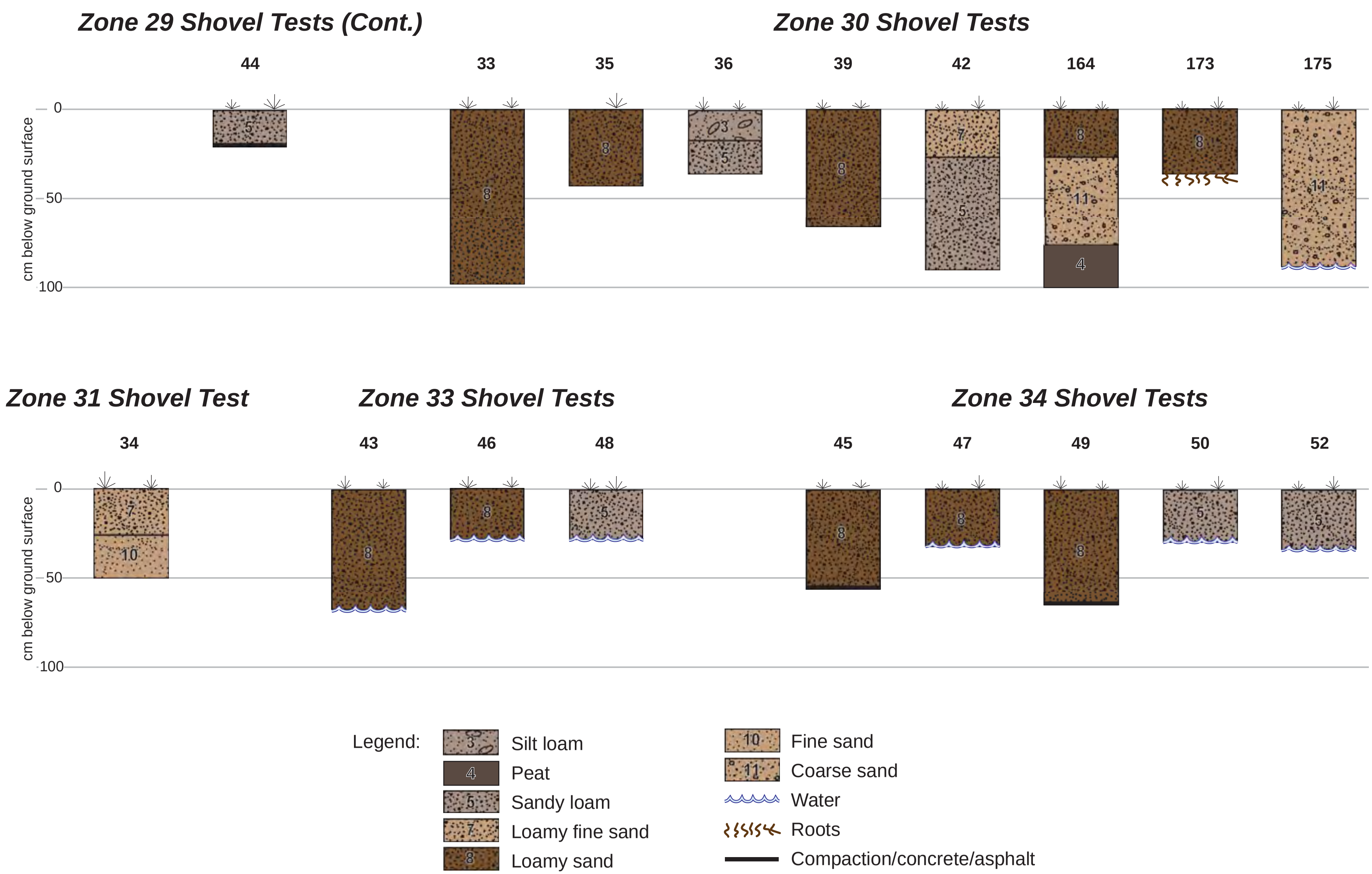


Figure D.3. *Profile drawings of shovel tests excavated in Zones 29-31 and 33-34.*

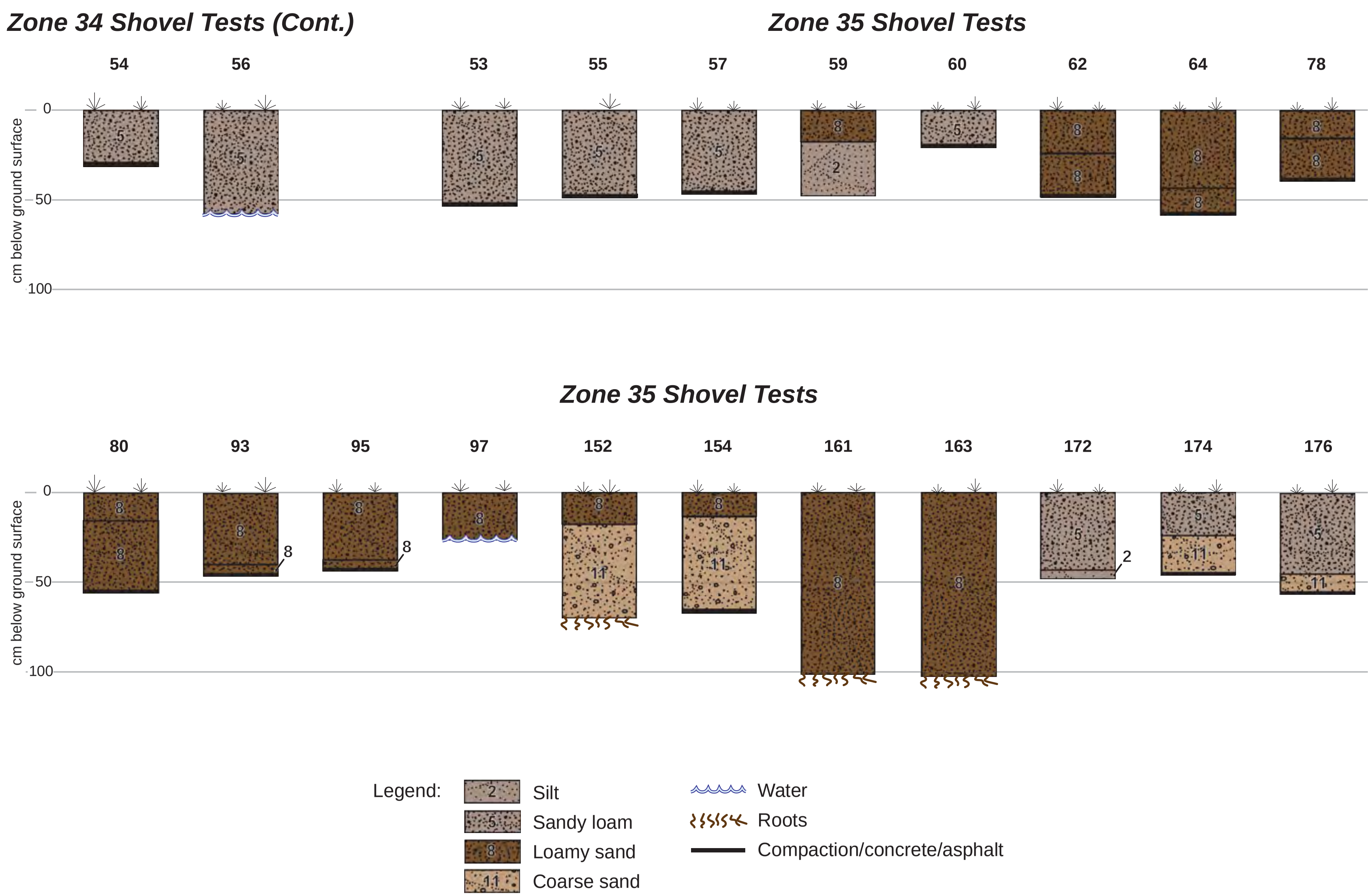


Figure D.4. *Profile drawings of shovel tests excavated in Zones 34 and 35.*

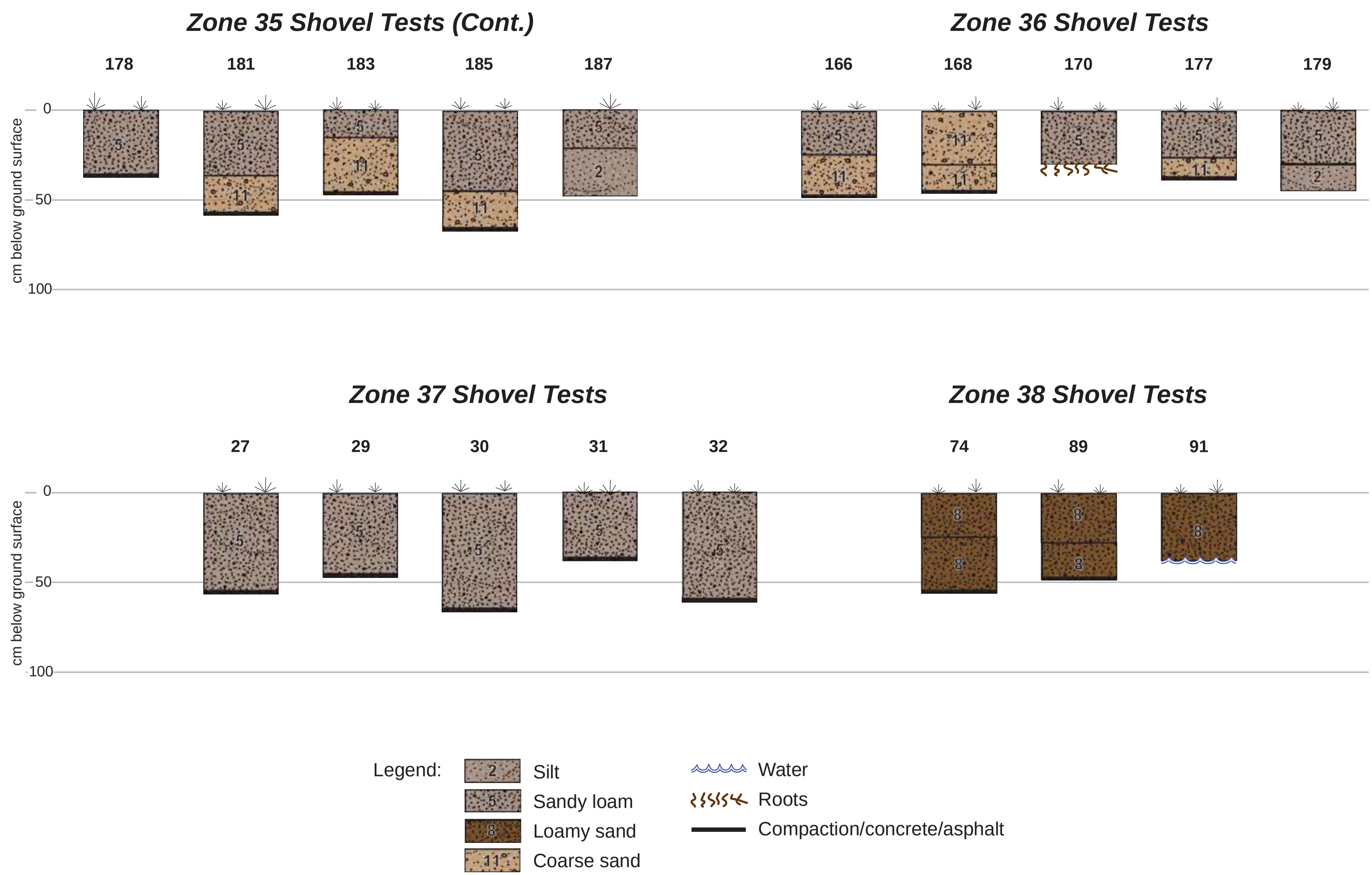


Figure D.5. *Profile drawings of shovel tests excavated in Zones 35-38.*

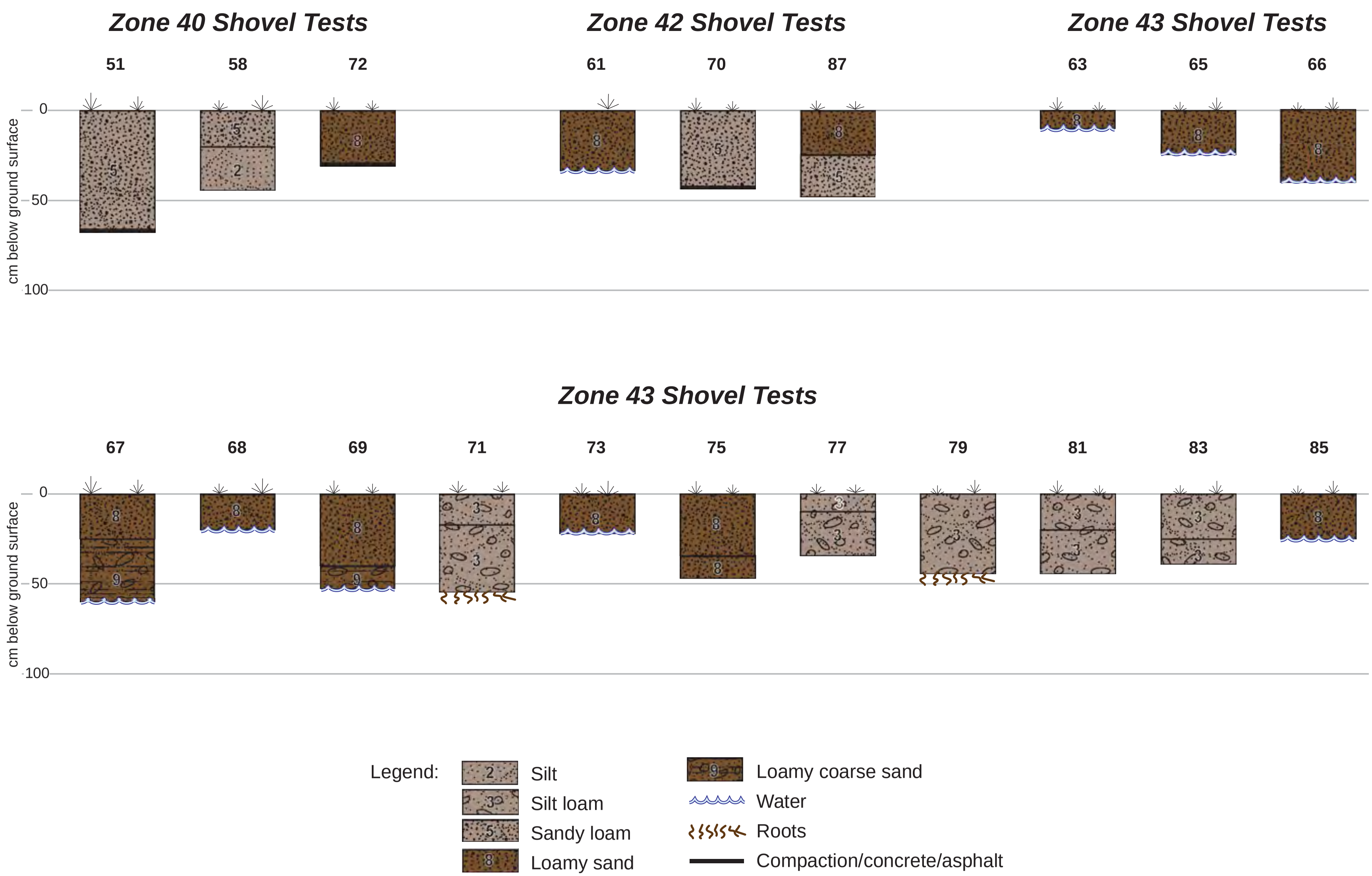


Figure D.6. *Profile drawings of shovel tests excavated in Zones 40, 42, and 43.*

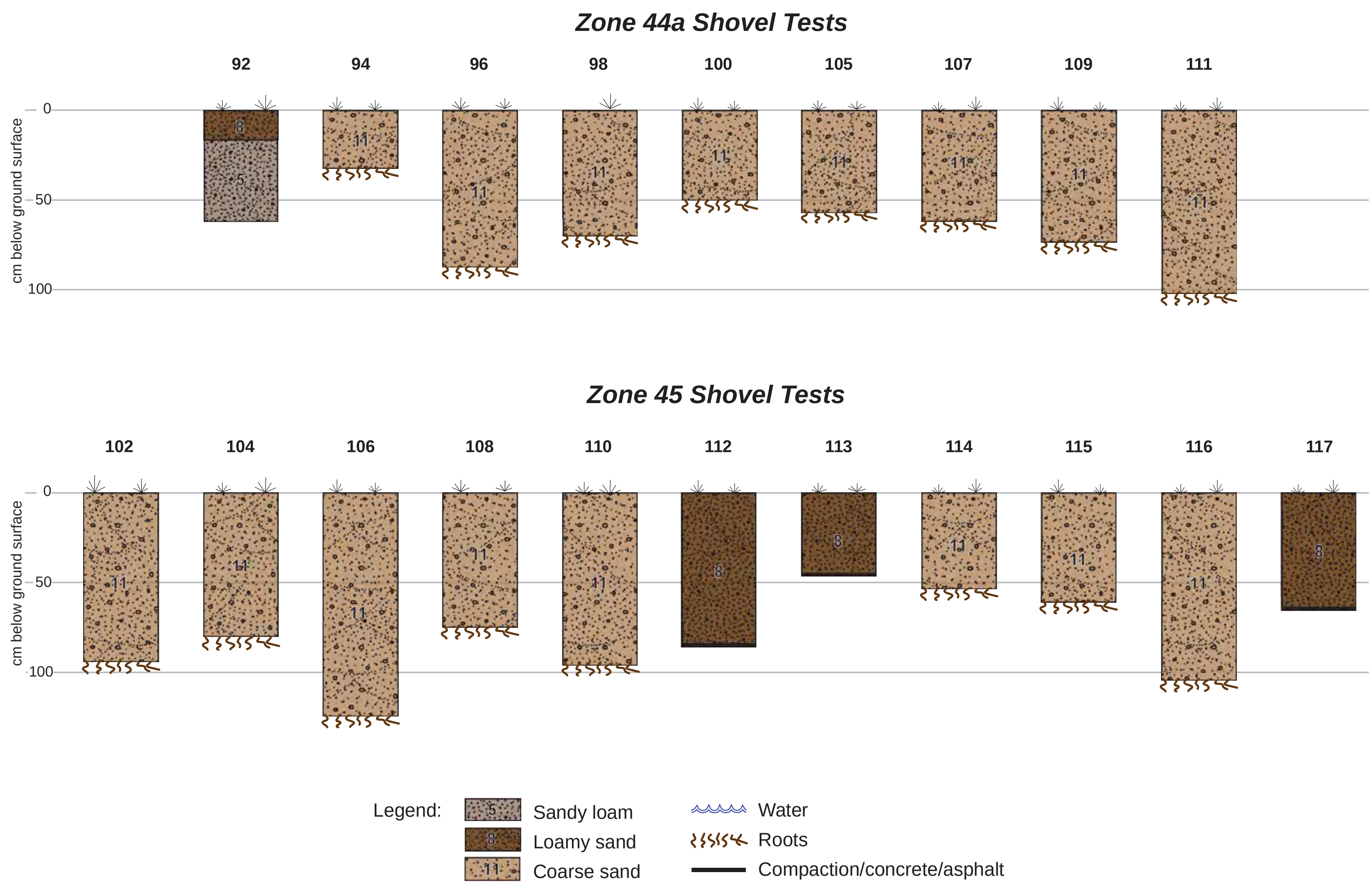


Figure D.7. *Profile drawings of shovel tests excavated in Zones 44a and 45.*

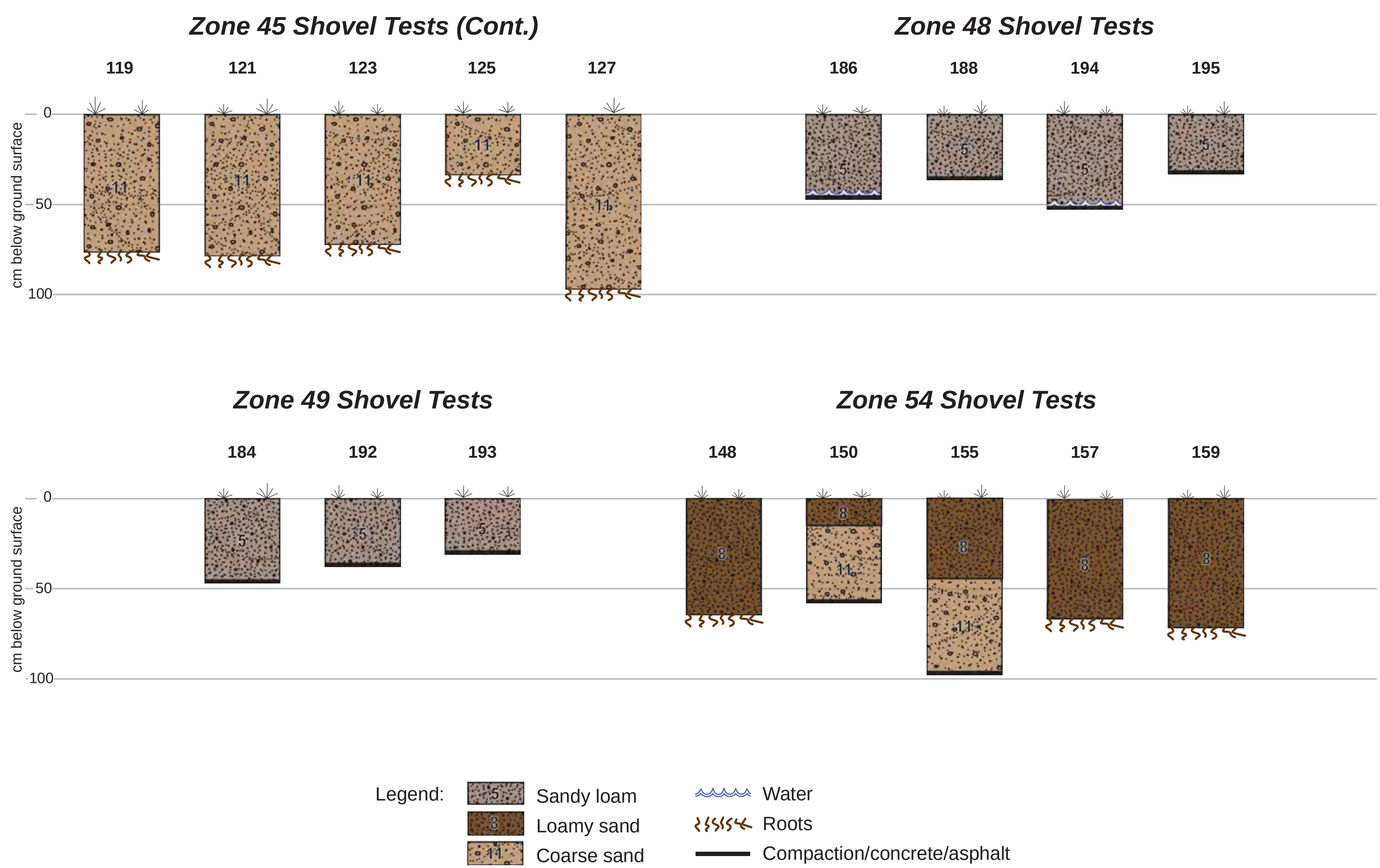


Figure D.8. *Profile drawings of shovel tests excavated in Zones 45, 48, 49, and 54.*

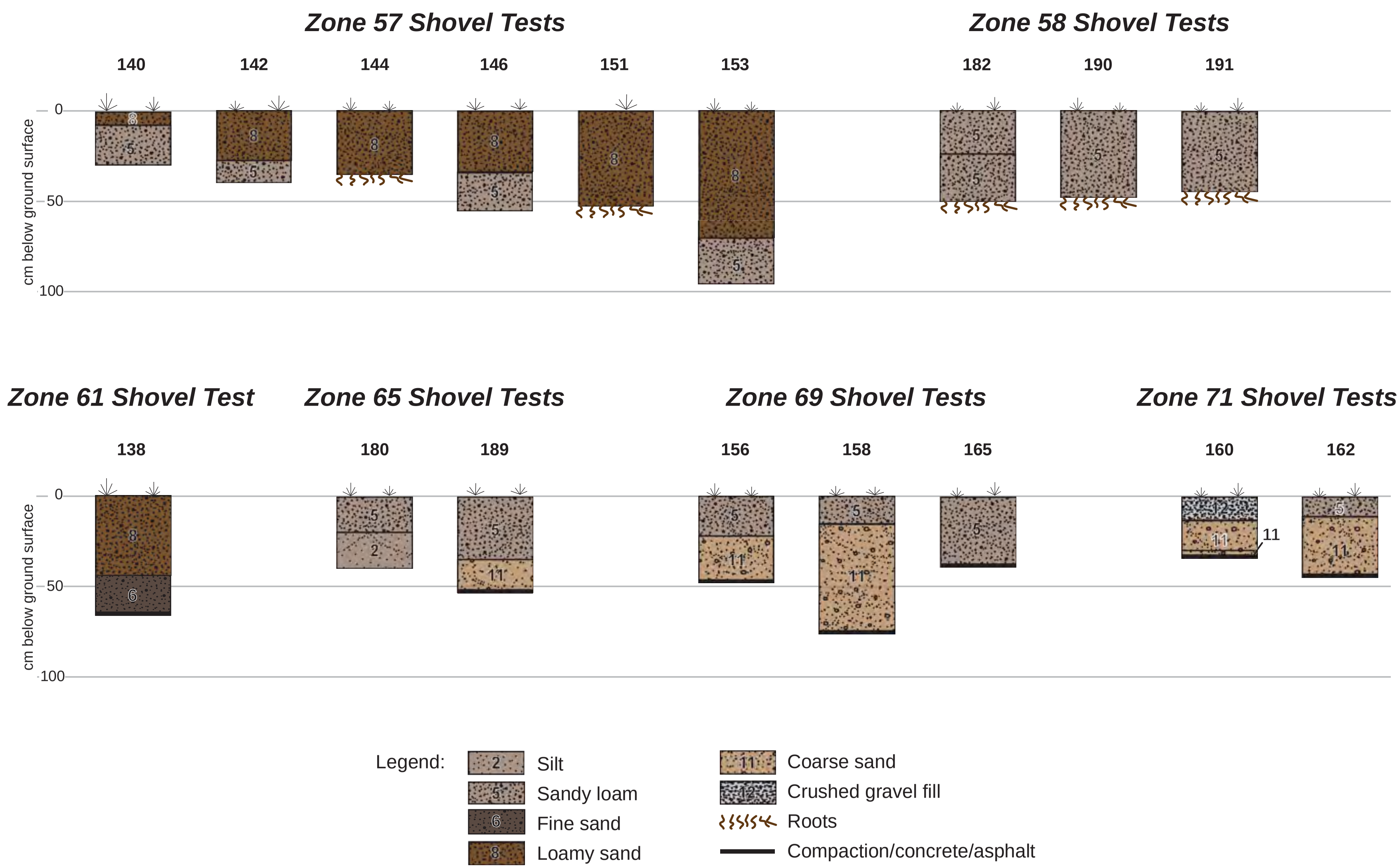


Figure D.9. *Profile drawings of shovel tests excavated in Zone 69 A1.*

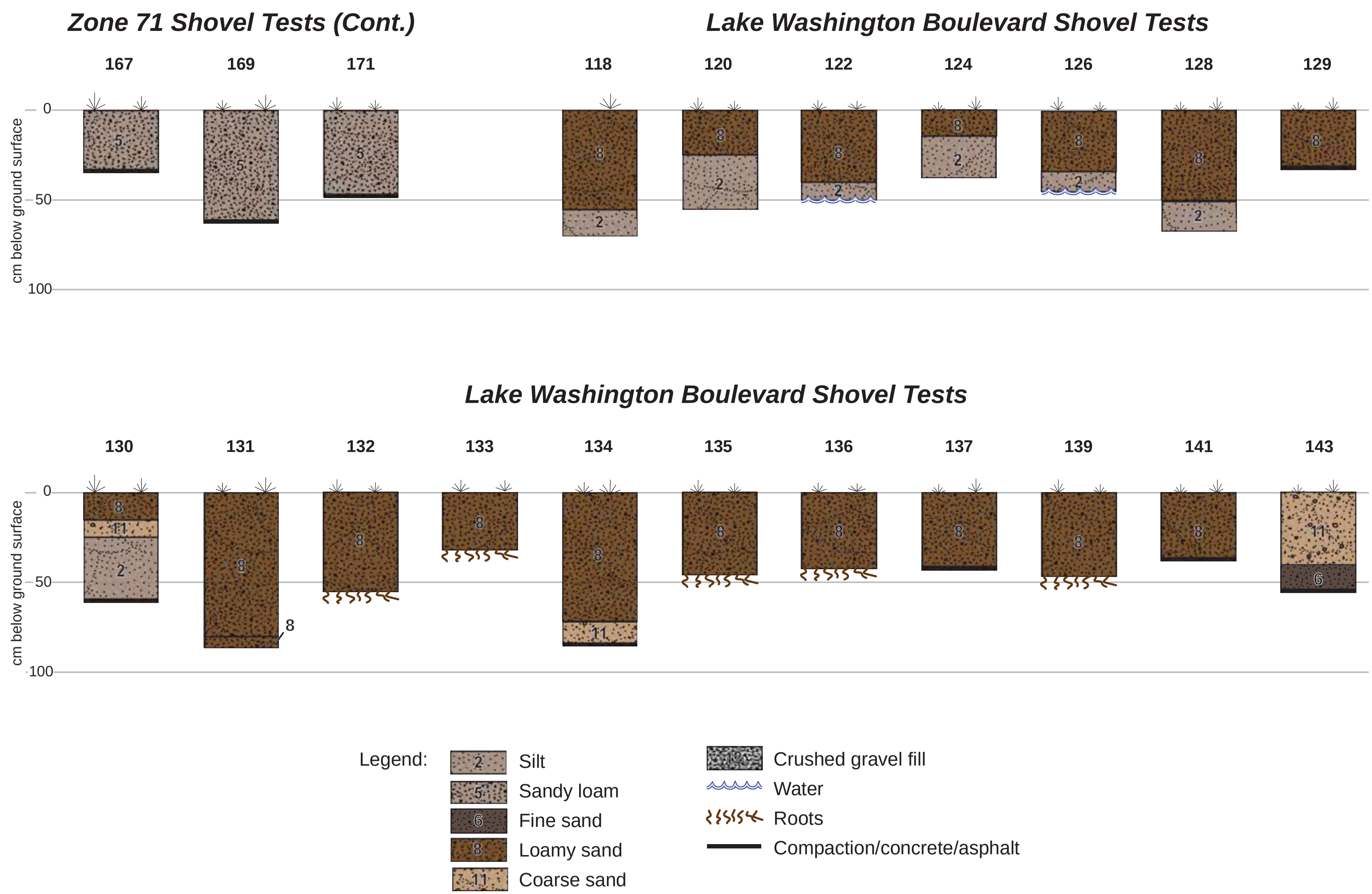


Figure D.10. *Profile drawings of shovel tests excavated in Zone 71 and along Lake Washington Boulevard.*

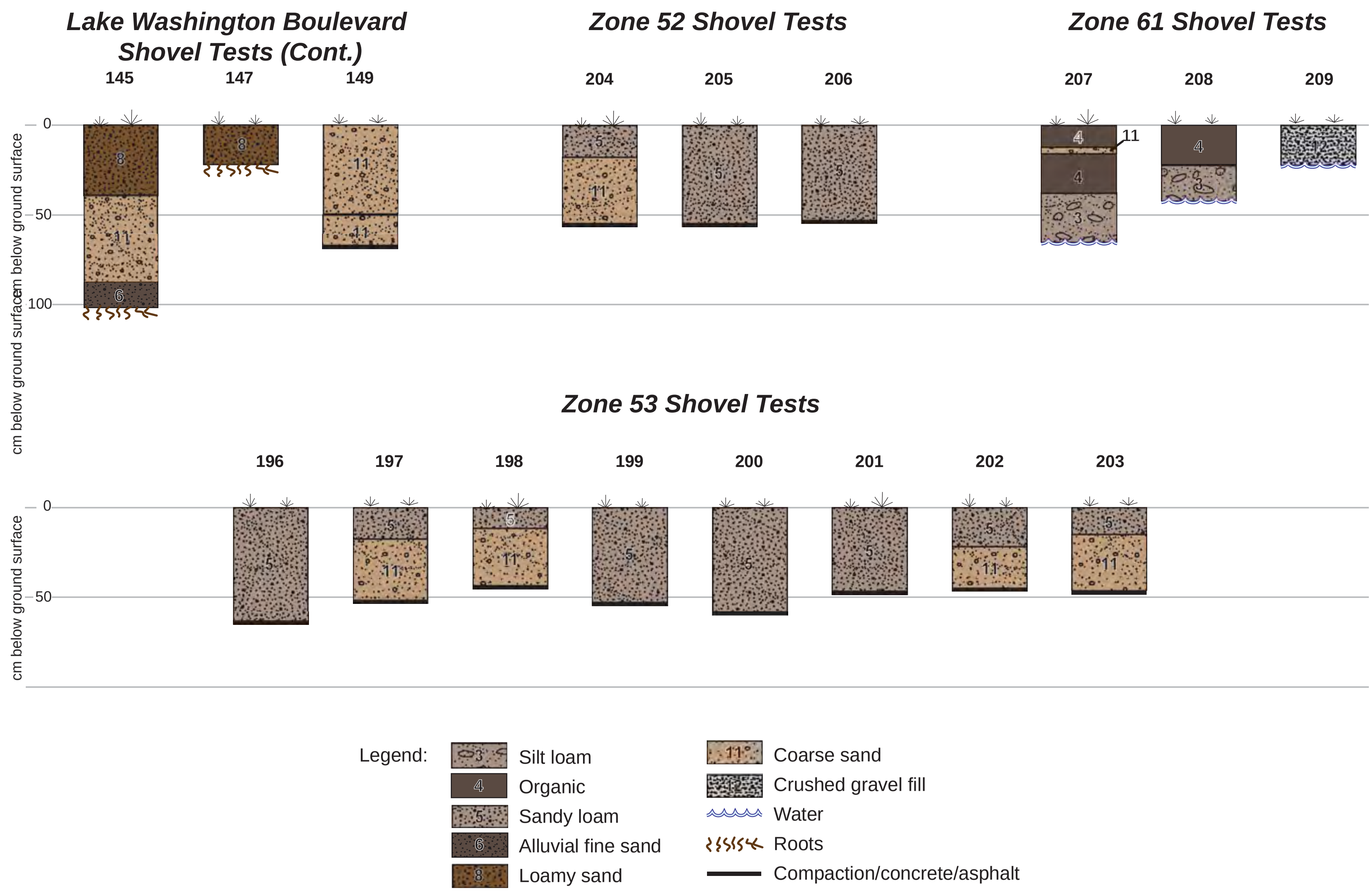


Figure D.11. *Profile drawings of shovel tests excavated along Lake Washington Boulevard and Zones 52, 53, and 61.*

Appendix E

Representative Shovel Test Photographs

Figure E.1. *Shovel test 12 in Zone 8. The scale is divided into 10 cm intervals*

Figure E.2. *Shovel test 23 in Zone 23. The scale is divided into 10 cm intervals*

Figure E.3. *Shovel test 50 in Zone 30. The scale is divided into 10 cm intervals.*

Figure E.4. *Shovel test 51 in Zone 40. The scale is divided into 10 cm intervals.*

Figure E.5. *Shovel test 62 in Zone 35. The scale is divided into 10 cm intervals*

Figure E.6. *Shovel test 59 in Zone 35. The scale is divided into 10 cm intervals*

Figure E.7. *Shovel test 83 in Zone 43. The scale is divided into 10 cm intervals.*

Figure E.8. *Shovel test 92 in Zone 44a. The scale is divided into 10 cm intervals.*

Figure E.9. *Shovel test 106 in Zone 45. The scale is divided into 10 cm intervals*

Figure E.10. *Shovel test 138 in Zone 61. The scale is divided into 10 cm intervals*

Figure E.11. *Shovel test 161 in Zone 35. The scale is divided into 10 cm intervals.*

Figure E.12. *Shovel test 164 in Zone 30. The scale is divided into 10 cm intervals.*

Figure E.13. *Shovel test 179 in Zone 36. The scale is divided into 10 cm intervals*

Figure E.15. *ST 207 in Zone 61. The scale is divided into 10 cm intervals.*

Figure E.14. *ST 198 in Zone 53.*

Appendix F

Ineligible Structures

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Chan House (see Figure B.18)

Property Address: 4240 Lake Washington Blvd.

Physical Description: This residence is a 1-story wood frame structure with a side-gabled rectangular plan. The shallow-pitched roof is covered with composition shingles and has moderately wide enclosed eaves, except for the west (front) elevation, where the eaves are wide and supported by knee braces. Exterior wall surfaces are clad with horizontal wood siding, except for the west elevation, which is finished with stucco. The foundation is concrete block. Windows are metal sash and include both fixed and sliding units. The front features two sets of double French doors, facing a full-width wood deck with railing. On the south elevations is a secondary entry beneath a shed-roofed open porch canopy.

Significance Narrative: This is a modest Ranch Style house built in 1953, when that style was beginning its long run of popularity. Ranch characteristics include the horizontal elevational profile, shallow-pitched roof, and wide eaves to the front. Otherwise it is a rather low key rendition of the style. The windows appear to be metal sash replacements. Even if they are original, this house lacks sufficient distinction for listing in the National Register of Historic Places.

Figure F.1. *Chan House, 4240 Lake Washington Blvd., north elevation, view to the south.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Morriseau House

Property Address: 4256 Lake Washington Blvd. (see Figure B.18)

Physical Description: This residence is a 1-1/2-story wood frame building with a rectangular plan. The side-gabled roof is covered with composition shingles and features wide, unenclosed eaves, exposed rafter ends, fascia boards, and knee-braces in the gables. Two prominent gabled dormers are placed on the west (front) roof slope. The fronts of the gables are clad with wood shingles, while other exterior surfaces are clad with wide wood clapboard siding. The foundation is poured concrete. The windows are all vinyl sash and include both fixed and sliding types. To the front is a full-width wood deck with railings and a pergola.

Significance Narrative: This house was built in 1953, and is sort of an anomaly due to it's Craftsman characteristics, which were in vogue in the 1920s and 1930s. Craftsman influence is seen primarily in the roof features, such as the open eaves, exposed rafter ends, fascia boards, and knee-braces. Otherwise the house is a mostly vernacular design. All the windows have been replaced with modern vinyl units, the shingles of the gable faces were probably recently applied, and the deck is relatively recent. Although the house retains good integrity of its historical appearance, changes to the original construction materials render it ineligible for listing in the National Register of Historic Places.

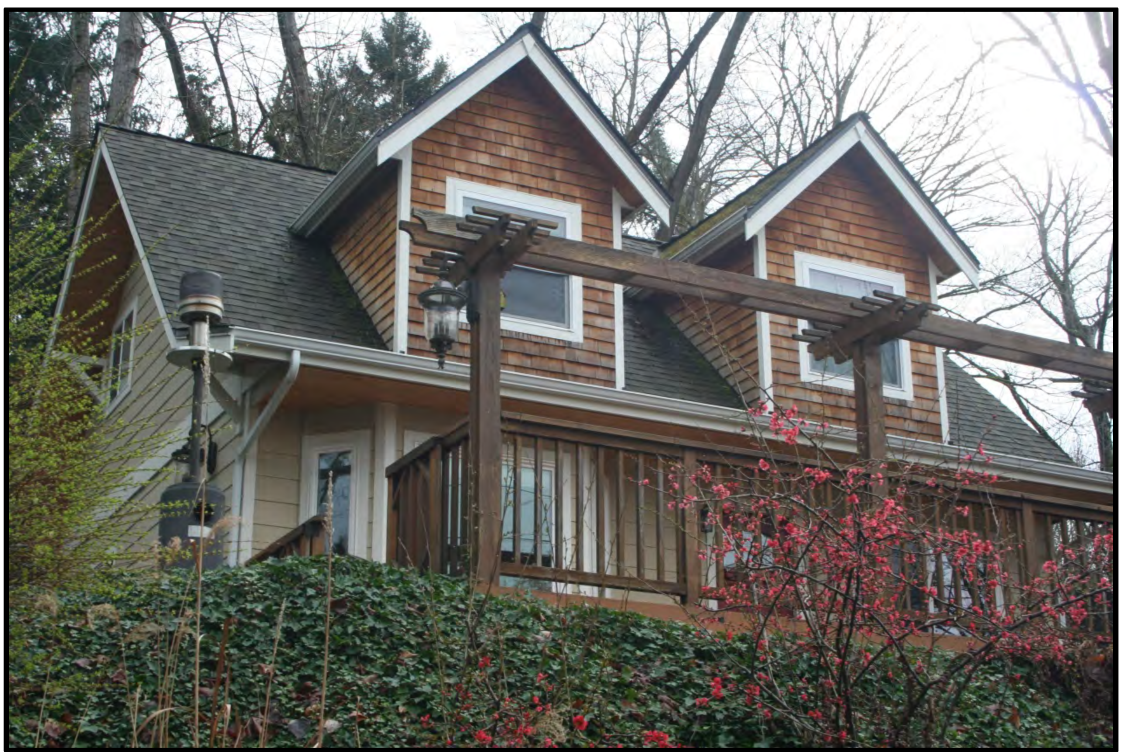


Figure F.2. *Morisseau House, 4256 Lake Washington Blvd., west elevation, view to the southeast.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Shulman House

Property Address: 4304 Lake Washington Blvd. (see Figure B.18)

Physical Description: This residence is a 1 1/2-story wood frame building with a daylight basement level below. It has a rectangular front-gabled plan. The roof is covered with composition shingles and has wide eaves fascia boards and knee-braces. Shed-roofed dormers are situated on the east and west slopes. A brick chimney emerges from near the roof crest. An enclosed 1-story porch wraps around the south and west sides of the house. A short shed-roofed addition extends from the north end of the east elevation. Exterior wall surfaces are clad with horizontal clapboard siding except for the dormer walls and the upper portions of the gables, which are clad with wood shingles. The foundation is poured concrete. A double set of French doors provides a front entry through the porch. Windows are mostly vinyl replacement units, including large picture windows in the porch, as well as other fixed sash and double-hung windows elsewhere. Directly east of the house is a wide, front-gabled garage, with a composition roof, horizontal wood siding, and knee braces in the gable faces. The vehicle door is missing.

Significance Narrative: This house was built in 1911, a little early to place in the Craftsman Style designation, although it does exhibit wide eaves and knee-braces. Other than that it is a combination of vernacular elements. If the wrap around enclosed porch is not an addition, it is certain that the large picture windows are. Furthermore, all of the original windows have been replaced by vinyl sash units. These extensive changes to the plan and windows render this building ineligible for listing in the National Register of Historic Places.

Figure F.3. *Schulman House, 4304 Lake Washington Blvd., south and east elevations, view to the northwest.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Woo House (see Figure B.16)

Property Address: 4436 119th Avenue SE

Physical Description: This residence is a 1-story wood frame building with a roughly rectangular plan. It is situated on a slope, allowing for a day-light basement level at the southwest corner. The shallow-pitched, hipped roof is covered with composition shingles and has widely-overhanging, enclosed eaves. A massive brick chimney with a rectangular cross-section is located on the west side of the roof peak. Exterior wall surfaces are clad with wide horizontal wood siding. The foundation is poured concrete. Two vehicle entry doors are placed on the south (front) elevation, accessing an attached garage. All windows are vinyl sash and include fixed and sliding units. A wood deck and railing wraps around the south (front) and west elevations.

Significance Narrative: This house was built in 1956, just as the Ranch Style was wildly gaining in popularity, becoming the dominant residential idiom in America. Diagnostic elements present include the horizontal facade profile, shallow-pitched roof with widely overhanging, enclosed eaves, massive masonry chimney, and attached garage. The primary departure from architectural integrity is the replacement of original wood sash windows with vinyl sash units. This alone is enough to precluded listing in the National Register of Historic Places.

Figure F.4. *Woo House, 4436 119th Avenue SE, south elevation, view to the north.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Wisecarver House (see Figure B.16)

Property Address: 4457 119th Avenue SE

Physical Description: This house is a 1-story wood frame structure with a rectangular plan. The shallow-pitched roof is covered with metal sheeting. A brick chimney with a rectangular cross-section emerges from the south roof slope. The eaves are wide and unenclosed. The foundation is poured concrete. Exterior wall surfaces are clad with vertical board siding. Windows are vinyl sash and include both fixed and sliding units. A wood deck spans the length of the east (front) elevation.

Significance Narrative: This residence was built in 1958, when the popularity of the Ranch Style was at its height. This is a rather minimalist rendition of the style. Diagnostic elements include the 1-story horizontal profile, the shallow-pitched roof, and the massive masonry chimney. The open eaves are a departure, however. The house exhibits poor integrity, emphasized by the metal roof and the vinyl windows. It is not eligible for listing in the National Register of Historic Places.

Figure F.5. *Wisecarver House, 4457 119th Avenue SE, east and north elevations, view to the southwest.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Cerna House (see Figure B.16)

Property Address: 11610 SE 45th Pl.

Physical Description: This house is a 1-story wood frame building with a rectangular plan. The shallow-pitched front-gabled roof is covered with rolled asphalt and has moderately-wide enclosed eaves. A brick chimney with a rectangular cross-section emerges from near the roof crest. Exterior walls are clad with vertical board siding. The foundation is poured concrete. All windows are vinyl sash fixed and sliding replacement units. A garage door is placed to the left side, consisting of a sliding door clad with the same material as the house walls.

Significance Narrative: This residence, built in 1958, is a modest example of the Ranch Style which was popular at the time. The roof has a more shallow pitch than is normal and currently has a temporary covering of rolled asphalt roofing. It has the horizontal elevational profile of the Ranch Style, but the windows have been altered. These and other factors render the house ineligible for listing in the National Register of Historic Places.

Figure F.6. *Cerna House, 11610 SE 45th Place, east elevation, view to the west.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Andrade House (see Figure B.12)

Property Address: 6633 Lake Washington Blvd. SE

Physical Description: This residence is a 1-story wood frame building with an L-shaped plan. The shallow-pitched hip roof is covered with composition shingles and has wide unenclosed eaves. A brick chimney emerges from near the central crest. Exterior walls are clad with horizontal wood clapboard siding. The foundation is concrete block. Windows are vinyl sash and include both fixed and double-hung units. The house is situated on a slope, allowing for a day-light basement level. Formerly, a garage door was located on the north elevation at this level. That opening has been sealed shut with concrete blocks. The front entry is at the top of a flight of stairs in the crook of the L. A wood frame deck with railing is attached to the west elevation.

Significance Narrative: This house was built in 1952 and has some things in common with a World War II Era Cottage, such as the shallow-pitched roof and boxy shape. Otherwise it is a nondescript vernacular structure with no distinctive characteristics. Obvious alterations include the filling in of the original garage entry and the replacement of all windows with vinyl sash units. This house is not eligible for listing in the National Register of Historic Places.

Figure F.7. *Andrade House, 6633 Lake Washington Blvd. SE, north and west elevations, view to the southeast.*

Project: I-405: SR 169 to I-90 Improvements Project

Property Name: Garcia House (see Figure B.14)

Property Address: 5449 Lake Washington Blvd.

Physical Description: This property consists of two buildings, a house and a smaller office/shop. The rectangular shop is gabled, with a Spanish Mission tile roof. A small cupola, also with tile roof, is situated at the roof center crest. The walls are clad with stucco. Windows are wood sash. The house has an irregular plan, with several gabled wings. The roof is the same Spanish Mission tile; the eaves are similar as well. The house is clad with stucco except for a newer gabled addition attached to the north side of the house. The siding here is wood clapboard. The windows are wood sash sliding and fixed units.

Significance Narrative: This residence and shop/office is distinguished by its Spanish Mission tile roof and stucco cladding. Built in 1952, it has some Ranch Style elements, mostly in the shallow-pitched roof. Otherwise it is a fairly nondescript building that has been modified, primarily the addition of the gabled extension to the north, with different siding. Although it is a close call, this house does not qualify for listing in the National Register of Historic Places.

Figure F.8. *Garcia House, 5449 Lake Washington Blvd. SE, east elevation, view to the west.*