

CULTURAL RESOURCES SURVEY REPORT LAKE TO SOUND TRAIL—SEGMENT B

PREPARED FOR:

King County Department of Transportation
Road Services Division
201 South Jackson Street, MS KSC-TR-0317
Seattle, WA 98104
Contact: Tom Minichillo, PhD
206.296.8085

PREPARED BY:

Trish Fernandez, MA, Melissa Cascella, MA, J. Tait Elder, MA, Christopher
Hetzl, MA, and Kurt Perkins
ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104
Contact: Trish Fernandez
206.801.2805

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Acronyms and Abbreviations

BP	before present
APE	area of potential effects
CFR	Code of Federal Regulations
cm	centimeters
cmbs	centimeters below surface
CVR	crypto-volcanic rock
DAHP	Department of Archaeology and Historic Preservation
FHWA	Federal Highways Administration
I-5	Interstate 5
I-99	Interstate 99
ICF	ICF International
mm	millimeter
MOA	memorandum of agreement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer
WAC	Washington Administrative Code
WHR	Washington Heritage Register
WISAARD	Washington Information System for Architectural and Archaeological Records Database
WSDOT	Washington State Department of Transportation

Project Description

King County is proposing to develop the Lake to Sound Trail, which would connect the southern end of Lake Washington to Puget Sound through the cities of Renton, Tukwila, SeaTac, Burien, and Des Moines, Washington. The trail would connect a number of existing trails, including the Cedar River Trail in Renton, the Green River Trail, the Westside Trail, and the Des Moines Creek Trail, meandering through regional recreational, residential, retail, and employment areas. The vision is to create a pathway alternative to driving that encourages physical activity, provides a safe route for children to travel to and from school, connects to other trails and a variety of facilities, and creates a resource that brings the community together. The King County Roads Services Division is managing the regulatory compliance for the project.

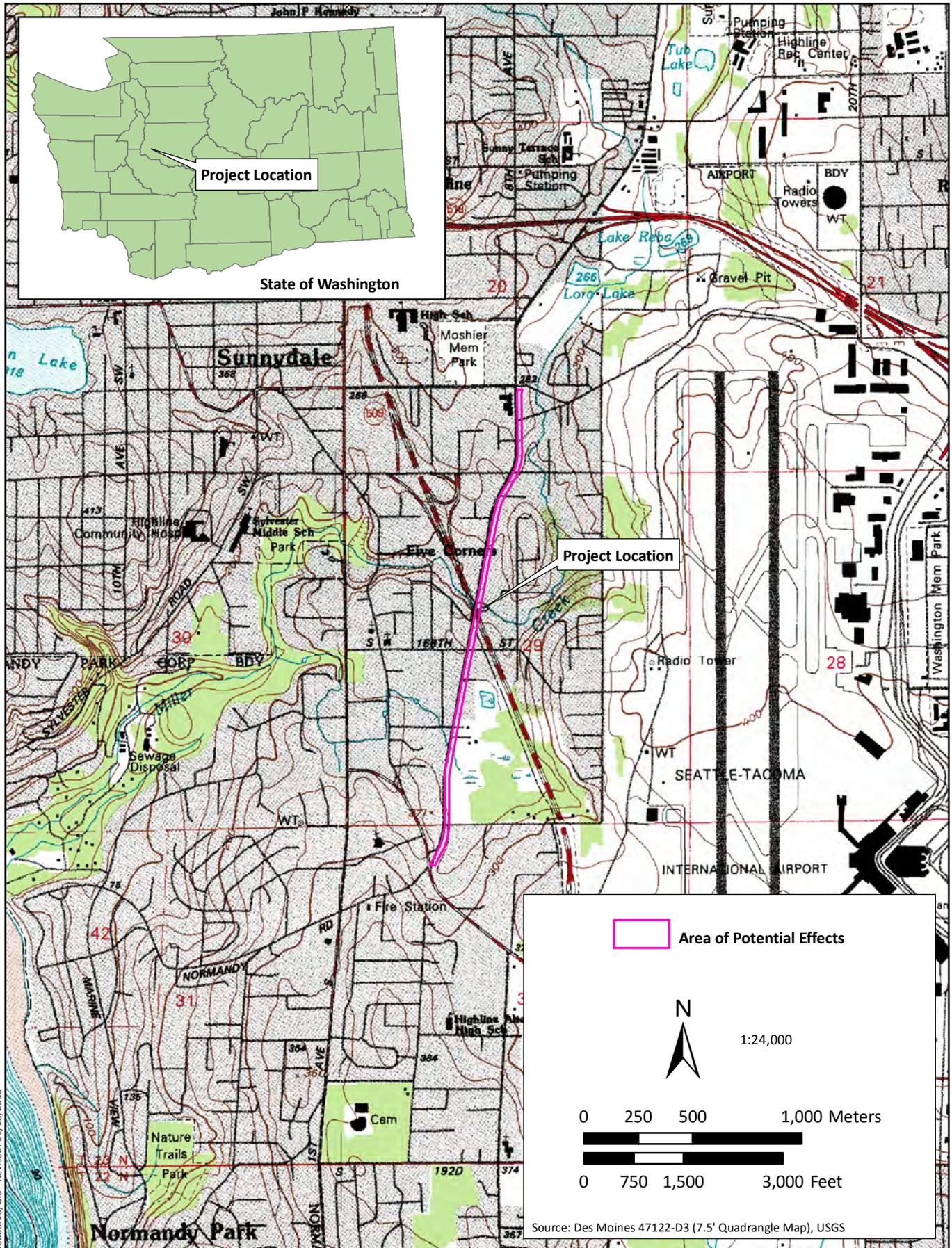
The Lake to Sound Trail project is a joint partnership between the cities stated above and King County and is funded by the Federal Highways Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting King County with FHWA funding and acting on behalf of FHWA as the lead federal agency. As a result of FHWA funding, the project must be conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to consider the effects of funded or approved undertakings that have the potential to affect any district, site, building, structure, or object that is listed in or eligible for listing in the NRHP. ICF International (ICF) conducted a cultural resources survey for the project to assist the County in fulfilling these requirements. The study comprises an archaeological investigation and a historic resources survey.

Lake to Sound Trail

The Lake to Sound Trail system would consist of 17 miles of regional trail for use as a multi-purpose, non-motorized route. Although many segments have been constructed, two (Segments A and B) remain to be designed and constructed. Because each segment is expected to vary in term of cultural resource sensitivity, they are expected to follow different schedules. As a result, environmental studies for each segment are being conducted separately. The current study addresses Segment B only.

Segment B

Segment B of the Lake to Sound Trail is located in the cities of SeaTac and Burien (Figure 1) along the east side of Des Moines Memorial Drive. The northern point begins at the intersection of Des Moines Memorial Drive and South 156th Street in SeaTac. The southern point of this segment is at the intersection of Des Moines Memorial Drive and South Normandy Road in Burien. This segment would connect to the existing Westside Trail and North SeaTac Park and to the bike lanes and sidepath running east-west on South 156th Street. This segment includes connections to the Duwamish Trail to the north and to Burien Town Square to the west; it would also provide access to the LINK Light Rail Station.



00803.10/GIS - Revised: 11/18/2010

Figure 1
Project Location
King County Lake to Sound Trail, Segment B

The length of Segment B is approximately 1.5 miles and would be configured as a two-way multiuse trail immediately adjacent to the street. It would include a 12-foot-wide paved path and a 3-to-6-foot shoulder and clear zone. The project would be limited to the existing transportation right-of-way. Existing elm trees along the east side of Des Moines Memorial Drive would be removed. No modifications to the existing above ground utilities are expected as part of this project.

Project Background

Area of Potential Effects

The area of potential effects (APE) for a project is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties (i.e., archaeological sites, traditional cultural properties, and/or built environment resources listed or eligible for listing in the National Register of Historic Places [NRHP]).

The APE for the proposed project is located along a developed road corridor. The northern extent of the APE is the intersection of Des Moines Memorial Drive and South 156th Street in the City of SeaTac (Figure 2a). The southern extent is the intersection of Des Moines Memorial Drive and South Normandy Road in the City of Burien. The APE is 1.4 miles long. The width of the APE includes the 18-foot project corridor, plus a 25-foot buffer on either side for potential effects on built environment resources.

The 18-foot project corridor (the construction footprint boundary) is defined as the area within which potential archaeological deposits could be affected (Figure 2b). This boundary includes all potential vertical and horizontal ground disturbance associated with the project. The vertical extent of the construction footprint boundary is from the level of existing ground surface to 3 feet below ground surface, which allows for the maximum extent of potential subsurface ground disturbance.

Regulatory Context

Federal

Section 106 of the National Historic Preservation Act

As a result of FHWA funding, the project must be conducted in compliance with Section 106 of the NHPA. Section 106 of the NHPA requires federal agencies to consider the effects of funded or approved undertakings that have the potential to impact any district, site, building, structure, or object that is listed in or eligible for listing in the NRHP, and must give the State Historic Preservation Officer (SHPO), affected tribes, and other stakeholders an opportunity to comment. Although compliance with Section 106 of the NHPA is the responsibility of the lead federal agency, others can undertake the work necessary to comply. The Section 106 process is codified in 36 Code of Federal Regulations (CFR) 800 and consists of the following five steps.

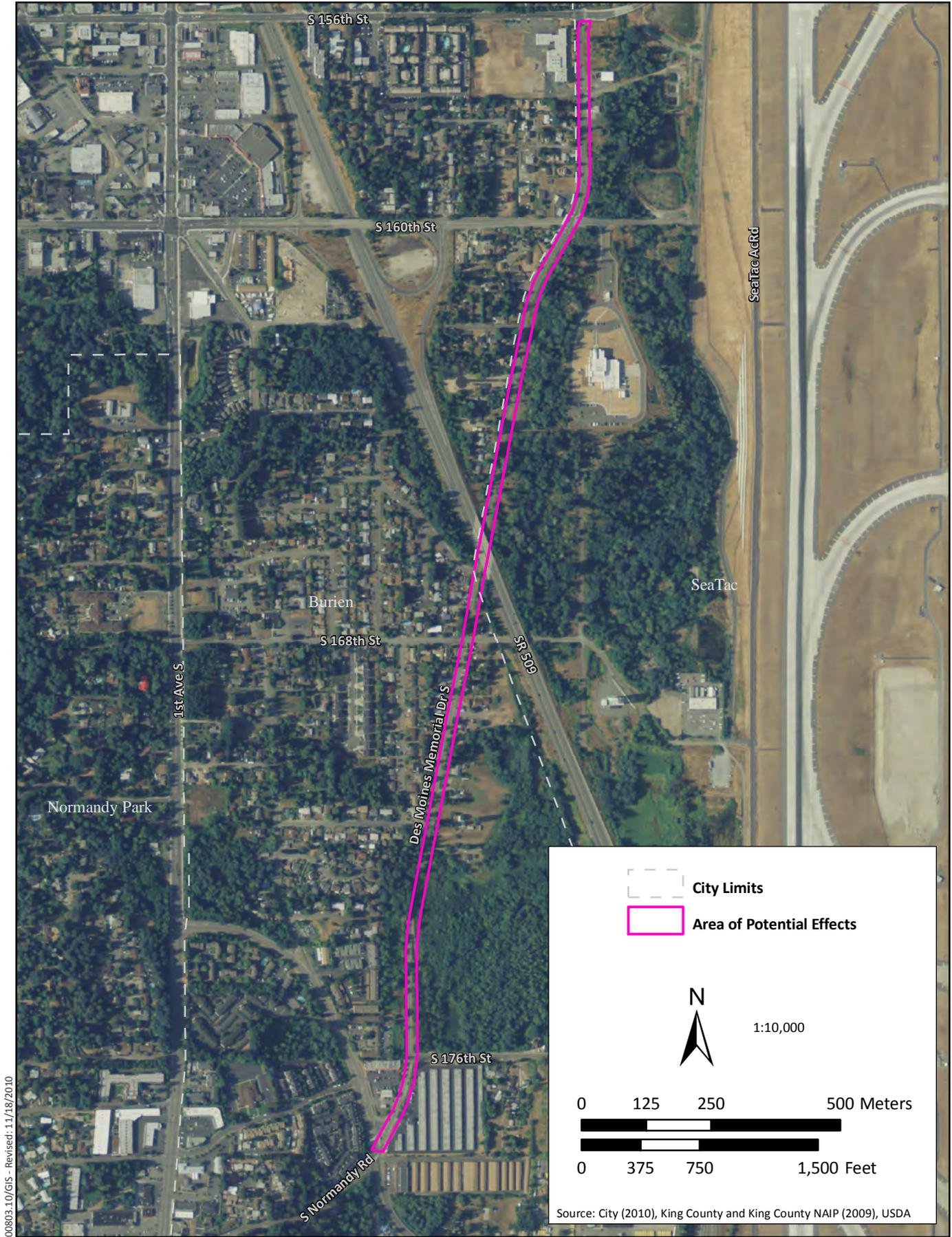


Figure 2a
 Area of Potential Effects
 King County Lake to Sound Trail, Segment B



Figure 2b
 Construction Footprint Boundary within Area of Potential Effects
 King County Lake to Sound Trail, Segment B

1. Initiate the process by coordinating with other environmental reviews, consulting with the SHPO, identifying and consulting with interested parties, and identifying points in the process to seek input from the public and to notify the public of proposed actions.
2. Identify cultural resources and evaluate them for NRHP eligibility (the process for which is explained below), resulting in the identification of historic properties.
3. Assess effects of the project on historic properties.
4. Consult with the SHPO and interested parties regarding any adverse effects on historic properties; and, if necessary, develop an agreement that addresses the treatment of these properties (e.g., a memorandum of agreement [MOA]).
5. Proceed in accordance with the project MOA, if an MOA is developed.

National Register of Historic Places Eligibility

First authorized by the Historic Sites Act of 1935, the NRHP was established by the NHPA as “an authoritative guide to be used by federal, state, and local governments; private groups; and citizens to identify the nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment.” The NRHP recognizes properties that are significant at the national, state, and local levels.

Two components are factored into determining if a property meets NRHP eligibility: significance criteria and integrity.

Significance Criteria

According to NRHP guidelines, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that meet any of the following criteria:

- A. A property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. A property is associated with the lives of persons significant in our past.
- C. A property embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- D. A property yields, or may be likely to yield, information important in prehistory or history.

Ordinarily, birthplaces, cemeteries, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years are not considered eligible for the NRHP, unless they satisfy certain conditions.

Integrity

The NRHP requires that a resource not only meet one of these criteria, but must also possess integrity. Integrity is the ability of a property to convey historical significance. The evaluation of a

resource's integrity must be grounded in an understanding of that resource's physical characteristics and how those characteristics relate to its significance. The NRHP recognizes seven aspects or qualities that, in various combinations, define the integrity of a property, including location, design, setting, materials, workmanship, feeling, and association.

Determining Adverse Effects

The assessment of effects on historic properties is codified in 36 CFR 800.5. An adverse effect on a historic property is found when an activity may alter, directly or indirectly, any of the characteristics of the historic property that render it eligible for inclusion in the NRHP. The alteration of characteristics is considered an adverse effect if it may diminish the integrity of the historic property's location, design, setting, materials, workmanship, feeling, or association.

State

Washington State Environmental Policy Act

The Washington State Environmental Policy Act (SEPA) requires that all major actions sponsored, funded, permitted, or approved by state and/or local agencies be planned so that environmental considerations—such as impacts on cultural resources—are considered when state-agency-enabled projects affect properties of historical, archaeological, scientific, or cultural importance (Washington Administrative Code [WAC] 197-11-960). These regulations closely resemble the National Environmental Policy Act (NEPA). Under SEPA, the Washington State Department of Archaeology and Historic Preservation (DAHP) is the specified agency with the technical expertise to consider the effects of a proposed action on cultural resources and provide formal recommendations to local governments and other state agencies for appropriate treatments or actions.

Washington Heritage Register

The WHR is an official listing of historically significant sites and properties found throughout the state. The list is maintained by DAHP and includes districts, sites, buildings, structures, and objects that have been identified and documented as being significant in local or state history, architecture, archaeology, engineering, or culture. To qualify for placement on the WHR, the resource must meet the following criteria.

- A building, site, structure or object must be at least 50 years old. If newer, the resource should have documented exceptional significance.
- The resource should have a high to medium level of integrity (i.e., it should retain important character-defining features from its historic period of construction).
- The resource should have documented historical significance at the local, state, or federal level.

Sites listed on the NRHP are automatically added to the WHR and a separate nomination form does not need to be completed.

Personnel

Trish Fernandez, MA, served as cultural lead and project manager for this cultural resources survey. Tait Elder, MA, served as Principal Investigator for archaeology; Christopher Hetzel, MA, served as

Principal Investigator for the built environment and provided peer review as the Contract Manager. Melissa Cascella, MA, led the archaeological fieldwork with the assistance of Kurt Perkins. Primary authors of this report were Trish Fernandez, Tait Elder, Melissa Cascella, Christopher Hetzel, and Kurt Perkins. Rori Perkins assisted with mapping, graphics and logistics. Kristen Lundstrom provided document editing and production services.

Environmental Setting

The proposed project is located within the Puget Sound lowlands (or Puget Sound basin), just west of the Cascade Mountains. Puget Sound provides easy access to a variety of productive terrestrial and marine environments in the lowland, and has lower precipitation rates and higher seasonal temperature ranges than those of the Pacific coast. The region has a maritime climate, which consists of cool, wet winters and mild summers. Annual precipitation is around 40 inches per year, with the majority of this occurring between October and March (Kruckeberg 1995).

Geologic Background

The Puget Sound basin is underlain by Eocene basalt flows, flow breccias, and tertiary rock (Franklin and Dyrness 1988:17). This bedrock, however, is deeply buried under glacial sediments (Alt and Hyndman 1984; Kruckeberg 1995). The topography of the Puget Sound basin is the result of surface scouring and moraine formation, caused by the Vashon stage of the Fraser glaciation (14,000 to 20,000 years before present [BP]), and glacial sediments deposited during the Everson interstade (14,000 to 11,000 BP) (Kruckeberg 1995:20). Vast amounts of meltwater, fed by retreating continental glaciers, created north-south-trending ridges and till plains. The APE is located on one of these till plains. The ground surface of the APE is composed of recessional glacial outwash, which was deposited in broad-braided streams originating from glacial meltwater, with occasional inclusions of glacial till (Booth and Waldron 2004). Since the beginning of the Holocene, very little sediment has been deposited naturally within the APE. Recent cultural modifications to sediment within the APE include gravel importation, topsoil removal, and utility trench excavations.

Paleoenvironment

As the continental and alpine glaciers began to recede during the late Pleistocene and early Holocene, climatic fluctuations occurred in the Pacific Northwest, indicated by variations in vegetation communities during this period. Analysis of charcoal and pollen cores from western Oregon and the lower Columbia River Valley indicate a regional warming trend between 14,850 and 13,000 BP, indicated by a shift from pine/spruce-dominated parkland to a warmer Douglas fir/fir-dominated forest. Between 13,000 and 11,000 BP, an increase in pine pollen and a higher frequency of charcoal in the archaeological record indicate either greater seasonality or a short-term cooling event, which could be related to the Younger Dryas cooling event (Grigg and Whitlock 1998; Walsh et al. 2008) in the early Holocene. The return of Douglas fir pollen after 11,000 BP indicates the return of warm, dry conditions (Grigg and Whitlock 1998). In the lower Columbia River Valley, however, dry conditions continued causing a shift from a fir-dominated forest to an oak-dominated savannah. More recently, between 5,400 BP and the present, the climate transitioned to increasingly wet winters and dry summers, indicated by decreased fire frequency (Walsh et al. 2008).

Within the Puget Sound basin, regional vegetation has shifted from lodgepole pine, bracken fern, and red alder just after the Pleistocene, to Douglas fir-dominated forests by the early Holocene. Since the

early Holocene, cedar and hemlock have become increasingly prevalent in the region (Hansen 1941; Barnosky 1985).

Flora and Fauna

The APE is located within the Puget Sound area subtype western hemlock (*Tsuga heterophylla*) vegetation zone. Softwoods, such as Douglas fir (*Pseudotsuga menziesii*), western hemlock, and western red cedar (*Thuja plicata*) are the dominant tree species in the region, while hardwoods, such as red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) are generally subordinate and found near water courses or riparian habitats. Garry oak (*Quercus garryana*) groves are found in lower elevations. In some areas, stands of pines (*Pinus* spp.) are major forest constituents, along with Douglas fir (Franklin and Dyrness 1988:72). Understory shrubs with potential food and resource value within the western hemlock zone include, but are not limited to, swordfern (*Polystichum muritum*); bracken fern (*Pteridium aquilinum*); Oregon grape (*Mahonia aquifolium*); vine maple (*Acer circinatum*); huckleberry (*Vaccinium* spp.); blackberry (*Rosaceae* spp.); ocean spray (*Holodiscus discolor*); salal (*Gaultheria shallon*); blueberries and huckleberries (*Vaccinium* sp.); blackberry, salmonberry, and thimbleberry (*Rubus* sp.); Wapato (*Sagittaria latifolia*); and red elderberry (*Sambucus racemosa*). Geophytes, such as common camas (*Camassia quamash*) and tiger lily (*Lilium columbianum*) were collected from prairie environments when available (Pojar and Mackinnon 1994; Gunther 1945).

Terrestrial faunal resources in the region include, but are not limited to, mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), cougar (*Puma concolor*), wolf (*Canis lupus*), coyote (*Canis latrans*), black bear (*Ursus americanus*), squirrels (*Sciurus* sp.), muskrat (*Ondatra* sp.), and raccoon (*Procyon lotor*) (Dalquest 1948).

Cultural Setting

Precontact

Cultural developments in the Puget Sound area west of the Cascade Mountains have been summarized by a number of authors (Kidd 1964; Greengo and Houston 1970; Mattson 1985; Schalk and Taylor 1988; Nelson 1990; Samuels 1993; Larson and Lewarch 1995; Ames and Maschner 1999; Blukis Onat et al. 2001; Forsman and Lewarch 2001). Studies of the archaeology and prehistory of Puget Sound and surrounding areas generally divide the prehistoric cultural sequence into multiple phases or periods from about 13,000 to 250 BP. These phases are for academic purposes and do not necessarily reflect tribal viewpoints.

A brief summary of the phases is provided below, based on the broad units developed by Blukis Onat et al. (2001):

- Period I (13,000 to 6,000 BP): Generalized resource development in a post-glacial environment
- Period II (6,000 to 2,500 BP): Developmental Salish period
- Period III (2,500 BP to 250 BP): Established Coast Salish culture

Period I (13,000 to 6,000 BP)

Traditionally, it has been thought that the first people in North America arrived by crossing the Bering Strait or following the Late Pleistocene coastline along the Pacific Ocean some time prior to 10,000 BP. Although a few sites in Washington State are clearly of Paleoindian age, none have been recorded in or near the APE.

Period II (6,000 to 2,500 BP)

In the APE, Period II may equate to the recently defined Tolt Phase (circa 7,100 to 3,600 BP), named from a prehistoric village site (*stuwe'yuq^w*) located along the Tolt River in eastern King County. It primarily includes components classified as part of the Olcott and/or Cascade traditions, which are defined as basic stone-tool reduction technologies such as crypto-volcanic rock (CVR) cobble core/flake reduction (Blukis Onat et al. 2001). Cascade sites are recognized by the leaf shaped Cascade points, which have been found across western Washington and have been dated to the last 8,000 years in various archaeological contexts. The relationship between Olcott and Cascade is unclear; they may be contemporaneous or sequential. More archaeological investigation in the region is needed before the relationship can be determined.

There is evidence of growth in organization of groups to manage resources and territories. However, well-known Northwest Coast traits such as multifamily houses and ascribed status are not present in this time period. Trade networks were also evident at this time with raw material from the Cascade foothills, northern Puget Sound, and the plateau being exchanged through various intermediaries.

Period III (2,500 BP to 250 BP)

The typical Northwest Coast culture traits appeared during this time period, such as a salmon-based subsistence, economy, and ascribed status. Continued adaptive strategies, specialized economic activities, complex social structure, and winter village occupations were also present during this time period. Smaller summer camps and resource procurement sites supported a dispersed population that then gathered at the large, semi-permanent winter village (Suttles and Lane 1990:485). Villages, base camps, and activity areas have been recorded on the Enumclaw Plateau, but none within 1 mile of the APE (Hedlund 1973, 1976, 1983).

Ethnography

The vicinity of the APE is ethnographically associated with the Coast Salish people, specifically the Lushootseed-speaking ancestors of today's Duwamish (Castile 1985; Haeberlin and Gunther 1930). At the time of European contact, the Duwamish people associated themselves with major water sources and villages, not tribal designations. Europeans later ascribed tribal designations onto village groups with similar cultural and economic patterns or geographic proximity (Smith 1964) As a result of the Point Elliott treaty of 1850, the Duwamish were not identified as a federally recognized tribe. As a result, some the Duwamish reside on the Muckleshoot reservation, along with the descendents from groups calling themselves St'kamish, Yilalkoamish, Skopamish, Smulkamish, Tkwakwamish, Duwamish, Snoqualmie, and Suquamish, while others remains affiliated with the Duwamish tribe, although it is not federally recognized.

According to Hall (1983:2), the typical main winter village was located at the mouth of a river. The land upstream was used for hunting and gathering, while the river itself provided fish and shellfish. Villages were linked through marriage between leading families and participation in major ceremonies (Suttles and Lane 1990:494). Villages usually included two to four longhouses made of cedar planks with gabled roofs. The interior housed the hearth, sleeping areas, and food storage. Hedlund (1973) also noted the use of sweat lodges, located near streams, with exterior fires from which hot stones were transported into the lodge and doused with water to create steam.

Subsistence was based on exploiting seasonally available resources. Temporary camps, occupied for a few days to a month, were set up to gather and process resources such as wild game, roots, bulbs, berries, salmon, and shellfish. Temporary hunting and gathering camps used lean-to's, tipi-like structures, or mat houses for protection from the elements (Haeberlin and Gunther 1930). Food that could be dried and stored, such as salmon and camas, were stored at the winter village in the long houses. Much of the cooking was done in pit ovens or by placing fire-heated rocks into baskets to boil the contents (Hedlund 1973).

Trade with neighboring groups brought additional food stores and raw material for basic and prestige goods. Basketry and wood items formed the base of much of the cultural material used by the Salish; however, these materials rarely survive in the archaeological record. Lithic (stone) artifacts are most commonly found in Precontact contexts. Lithic tools are commonly used to make tools of organic material (such as bone or wood) or process food, hides, and other organic materials. Expedient lithic tools (such as used flakes) rarely receive much mention because of their lack of temporal patterning or functional trends, but these expedient tools are more likely to be found in archaeological contexts than baskets or projectile points.

Historic Context

Early Beginnings

Mike Kelly was the first recorded Euroamerican to explore the hills surrounding the Duwamish Valley in 1869 (Anderson 1972:29A; Dorpat and Crowley 2003). Instead of finding the Puget Sound, as he had expected, Kelly discovered a lush valley with plentiful trees (Anderson 1972:29A; Eyler and Yeager 1972:1-2). On April 1, 1873, Kelly and his wife Jane moved into their 160 acre homestead centered at present-day South 148th Street and 16th Avenue South, northeast of the APE. Although known as "Hardscrabble" in earlier years due to its gravelly soils, Kelly promptly named the area Sunnydale (Anderson 1972:29A; Balzarini 1972:25; Eyler and Yeager 1972:1-2, 50; Kennedy 1989:111).

In order to settle the wild and densely forested land, Kelly obtained a permit to build a road from the established communities of Riverton and South Park. Assisted by Jane's stepfather, Kelly hacked a trail through the woods directly to their home (Eyler and Yeager 1972:2). After the trail was opened, more settlers were drawn to the area, each lengthening the road to reach their new homestead (Balzarini 1972:35; Eyler and Yeager 1972:10). Soon, this solitary transportation link for the little valley to Seattle was known as Kelly Road (additional names include Sunnydale Road or High Line Road) (Dorpat and Crowley 2003; Eyler and Yeager 1972:10).

Early Sunnydale encompassed an enormous area reaching from the communities of Riverton to the north, to Des Moines in the south, to the Military Road on the east, and to Puget Sound on the west (Eyler and Yeager 1972:10). The economy revolved heavily around farming and logging. The settlers

harvested the thick forests and processed some of the cut wood, establishing a shingle mill (Eyler and Yeager 1972:4; *Seattle Post-Intelligencer* 2010). Hops were a popular crop and the area also grew most of the produce and dairy products sold in Pike's Place Market (Dorpat and Crowley 2003; Eyler and Yeager 1972:3; Valley View Library 2007). Jane Kelly began the first school in the area in her kitchen until a proper structure was built near South 160th Street and Kelly Road (Balzarini 1972:28; Eyler and Yeager 1972:16; Kennedy 1989:111). Known as Sunnydale Elementary, this early school not only serviced as a place of learning for young residents but was also a social and civic gathering place for the community (Kennedy 1989:111). At the turn of the century, the business district for Sunnydale stretched for approximately 0.50 mile along Kelly Road, from 148th Street to 154th Street (Balzarini 1972:34-35; Eyler and Yeager 1972:10).

One of the early structures from the Sunnydale community still standing within the APE is the Del Villar house, located at 16806 Des Moines Memorial Drive. This house was built by the Woods family, who first immigrated to the area in the 1880s and remained in the house for several generations. Their residence was initially built in the late 1880s, burned down in the 1900s, and was rebuilt in 1908. Residing in the area for several decades, the Woods were actively involved in the local community. The Lorraine Rebekah Lodge, founded in 1919, had at least one Woods in its membership; and during the 1930s, Harry Woods managed a lumber yard in Des Moines (Elkin 1978; Kennedy 1989:33, 163).

As the community grew, so did the need for a more established transportation route. Kelly Road, a dirt and gravel thoroughfare was often impassible in the rainy season and high traffic (Balzarini 1972:34). Beginning June 1916, the northern 9.6 miles of Kelly Road were improved with brick paving (Rood et al. 2004; Balzarini 1972:34; Dorpat and Crowley 2003; Kennedy 1989:27) and the road was extended south to reach the community of Des Moines. Renamed High Line Road and designated as Permanent County Highway No. 14 at this time, many of its previously existing curves were straightened and low-lying areas filled in (Rood et al. 2004; Balzarini 1972:43; Kennedy 1989:28). Although infamously slippery when wet, this improvement opened the area to increased traffic and settlement (Balzarini 1972:43; Kennedy 1989:28; Valley View Library 2007). Shortly thereafter, the road was further extended to reach Tacoma; and by the 1920s it was the shortest and most traveled route between Tacoma and Seattle (Highline Historical Society 2010; Kennedy 1989:28). Despite these transportation improvements, the Sunnydale area remained rural well into the mid-nineteenth century (League of Women Voters of South King County 1973:2).

Des Moines Memorial Drive

At the end of World War I, residents of King County sought to honor the thousands of soldiers who had given their lives during the conflict by establishing a "Living Road of Remembrance" along High Line Road. First conceived by Colonel F.W. Galbraith, Jr., a resident of Vandalia, Ohio, the creation of a living memorial to fallen veterans was part of a nationwide movement; it was promoted by President Harding and several national organizations and pursued by many communities across the country. Planting a tree in his home state, Galbraith called for "all state Legion organizations to push for memorial tree planting" (Kennedy 1989:141). Soon, the American Forestry Association championed Galbraith's idea, suggesting that the living memorials be called "Roads of Remembrance." Answering these pleas, Lillian Gustin McEwan, president of the Seattle Garden Club and wife of a Seattle lumber pioneer, developed the idea of making High Line Road into a memorial by lining it with trees dedicated to World War I veterans. McEwan reached out to the community and found undeniable support (Highline Historical Society 2010; Kennedy 1989:141).

On November 11, 1921, Armistice Day commemorating the end of World War I, High Line Road was first dedicated as a Living Road of Remembrance honoring those who gave their lives in World War I, and McEwan directed the planting of the memorial's first 25 elm trees. The road began to be referred to as "Memorial Way" at this time (Rood et al. 2004).

On January 14, 1922, High Line Road was rededicated in a ceremony held at Sunnydale Elementary School. Renaming the route Des Moines Memorial Drive, the planting of 1,208 elm trees was initiated along an 11-mile stretch of the road from South Park in Seattle to areas south of the City of Des Moines. Wildflowers were seeded under the trees and along the road, then a two-lane brick corridor, in an effort to resemble tree-lined roads in France (Rood et al. 2004:ES-1). The ceremony was well attended; veterans, Seattle Garden Club members, local pioneers, a University of Washington football star, two World War I French generals, the American Legion, interested local residents, and the state Lieutenant Governor were all present (Rood et al. 2004:ES-1; Kennedy 1989:141-143). Each tree along the route commemorated an individual World War I veteran and was to be registered in the American Forestry Association's "National Honor Roll of Memorial Trees" (Balzarini 1972:84-88; Highline Historical Society 2010; Kennedy 1989:141-143).

Over the years, time has taken its toll on the Des Moines Memorial Drive trees. Only 230 of the original elms remain today, based on a corridor management plan completed for the memorial drive in 2004 (Rood et al. 2004). Some of the trees have succumbed to death from Dutch Elm disease, were pruned severely because of the presence of overhead utility lines, or had to be removed as a result of unavoidable expansion or alterations needed for the road or utilities (Balzarini 1972:86; Highline Historical Society 2010; Kennedy 1989:143). Although a few trees have been replanted over the years, the deterioration of the memorial trees has long been an important concern of the community. In response, King County and other parties joined together to establish a memorial shrine to honor veterans in the early 1960s (Rood et al. 2004). Dedicated on September 15, 1963, an 84-foot-long wall of rose-colored granite was engraved with an elm tree and the names of 1,428 King County servicemen who gave their lives in World War I. The memorial was installed in front of Sunnydale Elementary School on the southwest corner of South 156th Street and Des Moines Memorial Drive (Balzarini 1972:88; Highline Historical Society 2010; Kennedy 1989:143-144).

Subsequent plans for the preservation and improvement of the memorial drive and the remaining elms have been undertaken by many local advocates and public officials, beginning in the 1970s and continuing through the present. These efforts culminated in the King County Public Works Department planting 61 flowering crabapple and three blossoming cherry trees between South 130th Street and South 160th Street in 1982, and the Southwest King County Arts Council nominating Des Moines Way South for King County Landmark status. The nomination was unsuccessful, but on December 3, 1984, the King County Council passed Ordinance #7041 renaming Des Moines Way South "Des Moines Memorial Drive" (Rood et al. 2004).

In June 1999, King County Councilman Chris Vance secured financial support for a major restoration of the memorial drive. This led to the formal execution of an interlocal agreement between the cities of Des Moines, Normandy Park, SeaTac, and Burien; King County; and the Port of Seattle in support of the project and formalizing the creation of the Des Moines Memorial Drive Restoration Committee. The committee also included representatives from American Legion Posts, VFW, utility companies, community historical societies, and interested citizens. The committee's focus was to restore the memorial aspects of the historic memorial drive and make technical improvements required by the roadway. In 2001, the committee initiated a study of the memorial drive that concluded with the production of a comprehensive corridor management plan (Rood et al. 2004).

Major Changes

During the early 1900s, the Sunnydale area was dramatically affected by the establishment of the Sea-Tac International Airport, Interstate 5 (I-5), and Interstate 99 (I-99). I-99 was originally a rough wagon road built in 1901 and known as R.F. Morrow Road. In 1931–1932, this rough road was paved and renamed Pacific Highway 1. Later known as I-99, the route served as the new fastest route to downtown Seattle, over-shadowing but not completely eliminating, the influential presence of Des Moines Memorial Drive to the west (Eyler and Yeager 1972:15; Washington State Department of Transportation 2003:1).

A decade later, the area adjacent to Sunnydale drew attention as aviation took hold in the region. In 1940–1941, a crude airstrip and hangar were built at Bow Lake by Dean Spencer and George Wolf. However, the entry of the United States into World War II brought crippling air traffic into nearby Boeing field, overwhelming its facilities. At the request of the Civil Aviation Authority, in 1942 the Port of Seattle purchased 906.9 acres of Bow Lake, bounded by South 188th Street on the south, Des Moines Memorial Way on the west, South 160th Street on the north, and I-99 on the east, to build the additional airfield needed. Construction of the new airport began on January 2, 1943, and the location proved to be more complicated for engineers than originally anticipated, requiring the removal of 6.5 million cubic yards of soil to level the area and the installation of 450,000 cubic yards of concrete. The construction cost was \$4,235,000—well above the initial estimate of \$1 million. Completed and dedicated on October 31, 1944, the new airport was minimal, consisting of a runway, taxiways, and lighting, but was soon bustling with military traffic (Crowley 1999; Dorpat and Crowley 2003; League of Women Voters of South King County 1973:2).

After the close of the war, civilian traffic began to increase at the airport. A new terminal, designed by Herman A. Moldenhour, and a hangar for Northwest Airlines were built in 1949. By 1950, most airlines had moved their operations from Boeing Field to the new Sea-Tac International Airport (Crowley 1999; League of Women Voters of South King County 1973:2). Over the next decades, air traffic continued to increase, requiring the addition of two more runways (Crowley 2003).

As a result of the Sea-Tac International Airport, the growth in traffic to the area required a new transportation thoroughfare. In the late 1950s, large tracts of land were bought and cleared to make way for the new I-5 corridor, which eventually superseding both Des Moines Memorial Drive and I-99 as the most direct and fastest route between Tacoma and downtown Seattle (Becker 2002). Impacts on the community were immediately felt. Sunnydale experienced increased residential development and quickly became one of many populated suburbs that emerged in the area in response to the influx of jobs from both the airport and defense industry jobs. Meanwhile, Sunnydale's thriving downtown along Des Moines Memorial Drive saw less traffic and customers than ever before, and these establishments dwindled. In 1989, the area was renamed and incorporated as part of the City of SeaTac in honor of the airport which had so influenced its growth (Dorpat and Crowley 2003; Valley View Library 2007). Today the area is primarily residential with commercial structures remaining along Des Moines Memorial Drive to convey its former bustle.

Literature Review

Records Search

The search of existing data began with a review of the King County cultural resources database by King County archaeologist, Tom Minichillo. Once this data was reviewed, ICF conducted an additional search of the Washington Information System for Architectural and Archaeological Records Database (WISAARD). Both searches were conducted to identify previously documented archaeological, ethnographic, and historic resources within 1 mile of the APE. Although one cultural resources inventory survey has been conducted within the APE (Iverson et al. 2000), no cultural resources were identified. No other archaeological sites or historic resources are known to be located within the APE.

Five cultural resources surveys were previously completed within a 1-mile radius of the APE. As a result, one archaeological site and seven historic resources have been identified within this radius. Evaluation of the NRHP eligibility of the seven historic resources has not been previously conducted.

A summary of these cultural resources studies and the one archaeological site is provided in Table 1. The inventoried historic resources are listed in Table 2.

Table 1. Cultural Resources Surveys Conducted in and within 1 Mile of the APE

NADB #	Authors/Year	Report Title	Description	Cultural Resources
1339853	Iverson et al. 2000	Port of Seattle, Seattle-Tacoma International Airport Master Plan, Proposed Third Runway Archaeological Resources and Traditional Cultural Places Assessment, King County, Washington	Shovel probe and pedestrian survey. Portions located within APE.	None
1350367	Kanaby et al. 2007	City of SeaTac Westside Trail Improvement Project, SeaTac, Washington	Historic structure survey, shovel probes, and pedestrian survey. Located within 500 feet of northern margin of APE.	Non-NRHP eligible historic debris scatter, located outside of APE.

NADB #	Authors/Year	Report Title	Description	Cultural Resources
1354596	Rooke 2010	Cultural Resources Discipline Report for the Burien to Renton Rapid Ride Project – F Line, NEPA Documented Categorical Exclusion; Final Historical, Archaeological and Cultural Resources Discipline Report	Pedestrian survey and historic structure inventory. Located within 250 feet of northern margin of APE.	None.
1349400	Tingwall and Goetz 2006	Cultural Resources Report, Burien Town Square Street Improvement Project, Burien, Washington	Archaeological record search and pedestrian survey. Located 1 mile northwest of APE.	None.
1349413	Gillis 2007	SR 518/509 Interchange Improvements Cultural Resources Discipline Report	Historic structure inventory and shovel/auger probes. Located 0.50 mile north of northern margin of APE.	None.

NADB = National Archaeological Database; SR = State Route.

Table 2. Previously Inventoried Historic Resources Located Adjacent to the APE

Common Name	Address
Roland P. Rice Tract, Lot 1	16002 Des Moines Way South
Kessler Sylvan Tract, Lot 1	16404 Des Moines Way South
Kessler Sylvan Villa Tract, Lot 4	16444 Des Moines Way South
Kessler Sylvan Tract, Lot 4/Second Residence	16444 Des Moines Way South
Memorial Wall to World War I Veterans	Des Moines Park near South 156th
Felipe Del Villar House	16806 Des Moines Way
Irma Hoffman Home	17425 Des Moines Way

Consultation

On September 2, 2010, King County initiated the Section 106 of the NHPA process by providing the project scope and APE to WSDOT. WSDOT proceeded by initiating consultation under Section 106 with letters sent on September 15, 2010, to DAHP, Snoqualmie Nation, Puyallup Tribe, Yakama Nation, Muckleshoot Tribe, and Squaxin Island Tribe. The letters from WSDOT included detailed project information and requested comments on the APE and input on the proposed undertaking. Copies of these letters are provided in Appendix A. DAHP responded with a letter, concurring with the definition of the APE, on September 28, 2010.

Objectives/Expectations

Although no archaeological sites have been recorded in the APE, historical and background research of the area suggest that encountering cultural resources in the APE is possible. Based on previous research, there is a potential for historic features or artifacts. Historic-period sites that could exist in the APE include artifacts and features associated with historic homesteads, farming, and logging. Preliminary review of the APE, however, indicated that no historic archaeological resources and no more than three built environment resources are anticipated to be located in the APE.

The project is located in a developed urban area underlain by a glacial till plain formed during the Pleistocene epoch (2.588 million years ago to 12,000 years ago). Because very little sediment has been deposited within the APE since the end of the Pleistocene and there is only evidence for human occupation in the Puget Sound area during the Holocene epoch, it is unlikely that any buried cultural materials are located in the APE. However, the APE may contain areas where fill has been deposited over the ground surface. The archaeological methods presented below were designed to determine whether buried surfaces that have the potential to contain cultural materials exist in the APE.

Research Methods

Archaeological Investigations

ICF archaeologists conducted a cultural resources survey of the APE, using industry standard methods appropriate for finding and recording cultural resources. The field survey included walking transects across the APE to inspect exposed ground surface areas and excavating shovel tests to assess the potential for buried cultural deposits. The purpose of this survey was to identify any visible archaeological materials and characterize the vertical extent of the APE.

Ten shovel tests were excavated throughout the APE (Figure 3). The shovel tests consisted of an excavation unit roughly the shape of a truncated cone 50 centimeters (cm) (20 inches) in diameter at the surface and 40 cm (12 inches) at the base. Shovel tests were excavated until reaching Pleistocene sediments, dense gravel deposits of obstructing rocks, or groundwater—whichever occurred first. Shovel tests were typically excavated to a depth of 100 cm (39 inches) below the surface, wherever possible, and spaced at 30-meter (65.6-foot) intervals throughout the APE, focusing on areas that appeared to have intact topography where possible. All of the shovel tests were excavated by hand and sediments screened through 6-millimeter (mm) (0.25-inch) mesh hardware cloth. Upon completion of excavation, shovel tests were photographed using a digital camera and backfilled. Representative photographs are presented in Appendix B. The sod caps were then replaced, and the units were mapped using a tape and compass.

Historic Resources Survey

The historic resources survey involved a reconnaissance level examination and documentation of buildings and structures in the APE. The data collected included one or more photographs of each property from the public right-of-way, the architectural style of each resource (if identifiable), the type and materials of significant features, and the existence of alterations and overall physical integrity. Construction dates were established using data from the King County Tax Assessor and based on visual inspection. Properties built before 1965 were identified and information was collected about their physical characteristics. Properties identified as 45 years of age or older were evaluated to determine their eligibility for listing in the NRHP and recorded in the Washington State Historic Property Inventory Database, per DAHP reporting standards. Printed record forms for each property are provided in Appendix C of this report.



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Figure 3
Shovel Test Locations
King County Lake to Sound Trail, Segment B

Archaeological Investigations

On October 26, 2010, Melissa Cascella (MA) and Kurt Perkins (MA in progress) conducted archaeological investigations of the construction footprint boundary. The investigation included a pedestrian survey across the entire APE and the excavation of 10 shovel tests in areas not obscured by concrete or asphalt and where sediments appeared intact.

Pedestrian Survey

The pedestrian survey was conducted by walking the length of both the east and west road shoulder and examining the ground surface. All areas between the fog line and the right-of-way extent were examined. The surface of the APE consisted primarily of semi-flat terrain currently used for drainage, vehicle parking, and buffer areas between the road and businesses or residences (Appendix B). Surface visibility throughout the APE was found to be poor because of pavement, thick grasses, and vegetation covering much of the ground surface. Intermittent patches of clear ground, including soil along pathways, near rodent burrows, and underneath foliage, were examined for cultural resources. No cultural materials were observed on the ground surface in the APE.

Subsurface Investigations

Shovel tests were placed in areas to avoid buried utilities (Appendix B) these locations, to ensure the safety of the archaeologists, prevent damage to buried utilities, and because all sediments overlying these utilities would have been disturbed during line installation. A total of 10 shovel tests (number ST-1 through ST-10) were excavated throughout the construction footprint boundary (Figure 3). All 10 shovel tests were excavated on the east side of the Des Moines Memorial Drive right of way from South 156th Street to South 174th Street/Ambaum Boulevard South. Shovel tests ranged in depth from 30 to 103 cm below surface.

Once suspected glacial outwash was encountered, shovel tests were excavated to an additional 10 cm below surface (cmbs) to verify that these sediments were, in fact, Pleistocene-aged glacial outwash that lack both soil formation and the potential for cultural materials. Once these noncultural sediments were verified, the shovel test was terminated.

Disturbed sediment, or fill depth, was identified at depths ranging from 60 to 103 cmbs. A well developed "A" horizon was not identified during subsurface investigations, suggesting that the entire APE had been scraped prior to road building. Typically, the shovel test profiles consisted of mixed and redeposited glacial outwash with modern trash inclusions or imported topsoil, underlain by an oxidized reddish brown mixed gravelly sandy silt or sandy silt, ranging from slightly moist to very moist. Unweathered, intact, glacial outwash was identified underlying the oxidized sediments. In general, compaction increased with depth except in areas at the north end of the APE where some upper layers were more compact than the lower layers.

Summary of Shovel Tests

Several of the shovel tests throughout the APE contained modern materials including glass, nails, and plastic. A single Precontact artifact was located in ST-8, which is located on the northern end of the APE just south of 157th Way (Figure 4). This isolated find consists of a single late-stage core reduction flake made from a fine-grained red volcanic, possibly basalt or rhyolite. The flake is relatively intact with a bulb of percussion and feathered termination. The isolate was located 15 to 20 cmbs in a layer of heavily compacted, medium-to-coarse sand. Within this stratigraphic layer, several pieces of modern glass, a wire nail, a piece of plastic, and a non-diagnostic piece of chert shatter were also identified (Appendix B). The discovery of the modern materials in association with the Precontact isolate suggests that the area has been heavily disturbed. Because of road building and utility activities in the area, it is possible that this material was transported to the area. A detailed summary of ST-8 is provided in Appendix D of this document. The lithic flake was recorded, using State of Washington standards, as an isolated find (Appendix E).

Historic Resources Survey

The reconnaissance-level historic resources survey identified one building and one cultural landscape in the APE that are 45 years of age or older (Figure 5). The building, a gas station located at 15804 Des Moines Memorial Drive (Assessor Parcel Number 2023049283), was originally constructed in 1959 and consists of the original building and a large service bay canopy. The canopy appears to be less than 45 years old and is the only portion of the property that is in the APE. The identified cultural landscape comprises the extent of Des Moines Memorial Drive through the APE, including eight elm trees situated along the east side of the road. Both the building and memorial drive were evaluated to determine their eligibility for listing in the NRHP. Based on NRHP criteria for evaluation (36 CFR 60.4), neither the canopy nor the Des Moines Memorial Drive appears to be eligible for listing in the NRHP.



Figure 4
Isolate Location
King County Lake to Sound Trail, Segment B

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Figure 5
Built Environment Resources
King County Lake to Sound Trail, Segment B

Environmental Analysis

Topographic and geologic map analysis reveals that the APE is located on a relatively flat upland terrace. Adjacent to this terrace is a glacial till plain created by a Pleistocene-incised meltwater channel. The cities of Des Moines and SeaTac are situated upon this glacial till plain (Booth and Waldron 2004). Because the project is located on a flat terrace, there are no nearby up-elevation landforms from which sediments would have been transport and deposited. Therefore, no new sediment accretion could have occurred since the last major glaciation in the Pleistocene epoch.

Analysis of shovel test pit data revealed the presence of rounded gravelly sand and sandy silt. These sediments most closely approximate the composition of outwash deposits described by Booth and Waldron (2004), which were expected to be located in the APE. In addition, no intact buried soil was identified in shovel tests in the APE, indicating that the historic ground surface was removed prior to the construction of the road. Because archaeological deposits would have been expected at or near the ground surface, removal of this surface indicates that no intact archaeological deposits were likely to be found within the APE. The discovery of a stratigraphic layer with several pieces of modern debris, a piece of chert shatter, and a Precontact flake indicate the area was filled with material transported from another unknown location, an event likely associated with the construction or maintenance of the road.

National Register of Historic Places Evaluation

None of the historic resources identified in the APE are considered eligible for listing in the NRHP. The gas station at 15804 Des Moines Memorial Drive South, originally constructed in 1959, has been substantially altered such that it retains none of its historic integrity. It does not appear to embody characteristics or a method of construction that would warrant special recognition, and it is not known to be associated with a known event or person of particular significance.

Des Moines Memorial Drive appears ineligible for NRHP listing, due to loss of integrity. The memorial drive was originally established in 1921–1922 as a World War I commemorative property. Under NRHP Criterion Consideration F, such a property must possess significance based on its own value, apart from its commemorative value. Des Moines Memorial Drive is believed to be the only World War I memorial of this type in Washington State; it is the only one known to have selected the elm (reminiscent of France alleys) as its memorial tree; and it is the only memorial to have designated individual trees to individual fallen soldiers. Despite these characteristics, only 230 of the original 1,208 memorial elm trees remain in existence and nearly all of the original plantings and landscaping have been removed or altered. The memorial drive has also been subject to numerous road improvements and other projects, which have affected its integrity. Although Des Moines Memorial Drive continues to be recognized by residents of surrounding communities, it does not appear to retain sufficient integrity to convey historical significance related to its own design, age, tradition, or symbolic value, separate from the event it memorializes.

Conclusions

Assessment of Effect

Because no NRHP-eligible properties have been identified in the APE, no effects on historic properties are anticipated as a result of this project.

Recommendations

A finding of “no historic properties affected” is recommended under Section 106 of the NRHP.

No further archaeological work is recommended. However, there is always the possibility that previously unidentified and buried archaeological resources could be disturbed during ground-disturbing activities. To ensure significant cultural resources are appropriately treated in this unlikely event, it is recommended that an Unanticipated Discovery Protocol be in place before ground disturbance begins.

If any trees are to be replaced within the Des Moines Memorial Drive corridor, it is recommended that the replacement adhere to the guidelines presented in the *Des Moines Memorial Drive, Volume 1: Corridor Management Plan* (Rood et al. 2004:4-3-4-6). These guidelines address the selection of elm tree species, the size of the seedling, and the location for replanting. Replacement of the elm trees should be designed in consultation with the City of SeaTac and the City of Burien to coordinate these mitigation efforts with the overall implementation of the Corridor Management Plan to avoid duplicative efforts. For example, the Corridor Management Plan calls for the removal of above ground utilities and installation of underground utilities as part of the rehabilitation effort of the historic property. Installation of underground utilities could require the future removal of elm trees at the time of the installation, including the trees that would be replaced as part of the current project.

Chapter 8 References Cited

- Alt, D.D. and D.W. Hyndman
1984 *Roadside Geology of Washington*. Mountain Press Publishing Company, Missoula, Montana.
- Ames, K.M. and H.D.G. Maschner
1999 *Peoples of the Northwest Coast: Their Archaeology and Prehistory*. Thames and Hudson, London, United Kingdom.
- Anderson, G.
1972 ...In 1869, A Man Named Kelly. In *Our Burien*, edited by Esther Balzarini, pp. 29A-29C. King County Library System, Seattle, Washington.
- Balzarini, E.
1972 *Our Burien*. King County Library System, Seattle, Washington.
- Barnosky, C.W.
1985 Late Quaternary Vegetation near Battle Ground Lake, Southern Puget Trough, Washington. *Geological Society of America Bulletin* (96):263-271.
- Becker, P.
2002 Washington Establishes an Office for Clearing the Route of the Seattle Freeway (Interstate 5) on April 1, 1957. HistoryLink.org Essay 4168. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=4168, accessed November 9, 2010.
- Blukis Onat, A.R., M.E. Morgenstein, P.D. LeTourneau, R.P. Stone, J. Kosta, and P. Johnson
2001 Archaeological Investigations at *stuwe'yuq^w* – Site 45KI464 - Tolt River, King County, Washington. Prepared by BOAS, Inc., Seattle, Washington.
- Booth, D.B. and H.H. Waldron
2004 Geologic Map of the Des Moines 7.5' Quadrangle, King County, Washington.
- Castile, G.P.
1985 *The Indians of Puget Sound: the Notebooks of Myron Eells*. University of Washington Press, Seattle, Washington.
- Crowley, W.
1999 Sea-Tac International Airport: Part 1 – Founding. HistoryLink.org Essay 1004. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=1004, accessed November 10, 2010.
2003 Sea-Tac International Airport: Third Runway Project. HistoryLink.org Essay 4211. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=4211, accessed November 10, 2010.

- Dalquest, W.W.
1948 *The Mammals of Washington*. University of Kansas Press, Lawrence, Kansas.
- Dorpat, P. and W. Crowley
2003 SeaTac – Thumbnail History. May 31. Electronic document,
http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=4181, accessed
October 29, 2010.
- Elkin, L.
1978 Historic Properties Inventory Form for 16806 Des Moines Way. File No. 2061. On file at
the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Eyler, M, and E.A. Yeager
1972 *The Many Roads to Highline*. Highline Publishing Company, Burien, Washington.
- Forsman, L. and D. Lewarch
2001 Archaeology of the White River. *White River Journal: A Newsletter of the White River
Valley Museum*. April 2001. Electronic document,
http://www.wrvmuseum.org/journal/journal_0401.htm, accessed November 2, 2010.
- Franklin, J.F. and C.T. Dyrness
1988 *Natural Vegetation of Oregon and Washington*. Oregon State University Press, Corvallis,
Oregon.
- Gillis, N.
2007 SR518/509 Interchange Improvements Cultural Resources Discipline Report. File No.
NADB 1349413. On file at the Washington State Department of Archaeology and Historic
Preservation, Olympia, Washington.
- Greengo, R.E. and R. Houston
1970 *Archaeological Excavations at Marymoor Farm*. Department of Anthropology. University
of Washington, Seattle, Washington.
- Grigg, L.D. and C. Whitlock
1998 Late-Glacial Vegetation and Climate Change in Western Oregon. *Quaternary Research*
(49):287-298.
- Gunther, E.
1945 *Ethnobotany of Western Washington: The Knowledge and Use of Indigenous Plants by
Native Americans*. University of Washington Press, Seattle, Washington.
- Haeberlin, H. and E. Gunther
1930 *The Indians of Puget Sound*. University of Washington Press, Seattle, Washington.
- Hall, N.I.
1983 *In the Shadow of the Mountain: A Pioneer History of Enumclaw*. The Courier-Herald
Publishing Company, Enumclaw, Washington.
- Hansen, H.P.
1941 Further Pollen Studies of Post Pleistocene Bogs in the Puget Lowlands of Washington.
Bulletin of the Torrey Botanical Club (68)3:133-148.

Hedlund, G.C.

- 1973 Background and Archaeology of Inland Cultural Sites at Connell's Prairie, Washington (45PI44a db 45PI45). Green River Community College. Auburn, Washington.
- 1976 Mudflow Disaster. In *Northwest Anthropological Research Notes* 10(1):77-89.
- 1983 On the Enumclaw Plateau in the Southern Puget Sound Lowland. In *Prehistoric Places on the Southern Northwest Coast*, edited by Robert E. Greengo, pp. 113-120. Thomas Burke Memorial Washington State Museum, University of Washington. Seattle, Washington.

Highline Historical Society

- 2010 Des Moines Memorial Way – Road of Remembrance. Electronic document, http://www.highlinehistory.org/des_moines_drive_english.html, accessed November 9, 2010.

Iversen, D.R., L. A. Forsman, D.E. Lewarch, and L.L. Larson

- 2000 Port of Seattle, Seattle-Tacoma International Airport Master Plan, Proposed Third Runway Archaeological Resources and Traditional Cultural Places Assessment, King County, Washington. File No. NADB 1339853. On-file at the Washington State Department of Archaeology and Historic Preservation, Olympia, Washington.

Kanaby, K., D.F. Tingwall, and L.N. Goetz

- 2007 City of SeaTac Westside Trail Improvement Project, SeaTac, Washington. File No. NADB 1350367. On file at the Washington State Department of Archaeology & Historic Preservation, Olympia, Washington.

Kennedy, R.T.

- 1989 *One Hundred Years of the "Waterland" Community: A History of Des Moines, Washington*. Gretchen F. Schmidt, ed. City of Des Moines, Des Moines, Washington.

Kidd, R.S.

- 1964 A Synthesis of Western Washington Prehistory from the Perspective of three Occupation sites. Master of Arts Thesis. University of Washington, Seattle, Washington.

Kruckeberg, A.R.

- 1995 *The Natural History of Puget Sound Country*. University of Washington Press, Seattle, Washington.

Larson, L.L. and D.E. Lewarch, eds.

- 1995 The Archaeology of West Point, Seattle Washington: 4,000 Years of Hunter-Fisher-Gatherer Land Use in *Southern Puget Sound*. Vols. 1-2. Prepared for CH2M Hill, Bellevue, Washington. Prepared by Larson Anthropological/Archaeological Services, Seattle, Washington.

League of Women Voters of South King County

- 1973 *Sea-Tac and Its Neighbors*. League of Women Voters of South King County, Seattle, Washington.

Mattson, J.L.

- 1985 Puget Sound Prehistory: Postglacial Adaptations in the Puget Sound Basin with Archaeological Implications for a Solution to the "Cascade Problem." Unpublished Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill, North Carolina.

- Nelson, C.M.
1990 Prehistory of the Puget Sound Region. In *Northwest Coast*, edited by W. Suttles, pp. 481-484. Handbook of North American Indians, Vol. 7, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Pojar, J. and A. MacKinnon, eds.
1994 *Plants of the Pacific Northwest Coast*. Lone Pine Press, Vancouver, British Columbia, Canada.
- Rood, J., S. Black, A. Rapelje, R. Watland, and B. Balberdi
2004 Des Moines Memorial Drive, Corridor Management Plan, With Rehabilitation and Enhancement Guidelines. WWI Living Road of Remembrance, Washington State. Prepared for King County, City of Burien, City of Des Moines, City of Normandy Park, and City of SeaTac. Prepared by SB & Associates, Inc. Electronic document, <http://roadofremembrance.org/Documents/DMMD%20Final.pdf>, accessed November 10, 2010.
- Rooke, L.
2010 Cultural Resources Discipline Report for the Burien to Renton RapidRide – F Line Project, NEPA Documented Categorical Exclusion. Final Historical, Archaeological, and Cultural Resources Discipline Report. File No. NADB 1354596. On-file at Washington State Department of Archaeology & Historic Preservation, Olympia, Washington.
- Samuels, S.R.
1993 The Archaeology of Chester Morse Lake: Long-Term Human Utilization of the Foothills in the Washington Cascade Range. Project Report No. 21. Prepared for City of Seattle. Prepared by the Center for Northwest Anthropology, Department of Anthropology, Washington State University, Pullman, Washington.
- Schalk, R.F. and R.L. Taylor, eds.
1988 The Archaeology of Chester Morse Lake: The 1986-87 Investigations for the Cedar Falls Improvement Project. Prepared for the Seattle Water Department, Seattle, Washington. Prepared by the Seattle Research Unit, Center for Northwest Anthropology, Washington State University, Seattle, Washington.
- Seattle Post-Intelligencer*
2010 SeaTac: The city By the Runway. Electronic document, <http://www.seattlepi.com/webtowns/article.asp?WTID=72&ID=105198>, accessed October 29, 2010.
- Smith, A.H.
1964 Ethnographic Guide to the Archaeology of Mount Rainier National Park. Draft prepared for the National Park Service. Washington State University. Pullman, Washington. Formal report publication anticipated by National Park Service, Columbia Cascades System Support Office, Seattle, Washington.
- Suttles, W. and B. Lane
1990 Central Coast Salish. In *Northwest Coast*, edited by W. Suttles, pp. 453-475. Handbook of North American Indians, Vol. 7, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Tingwall, D. and L.N. Goetz

- 2006 Cultural Resources Report, Burien Town Square Street Improvement Project, Burien, Washington. File No. NADB 1349400. On file at Washington State Department of Archaeology and Historic Preservation, Olympia, Washington.

Valley View Library

- 2007 History of City of SeaTac. June 26. Electronic document, <http://www.kcls.org/valleyview/history.cfm>, accessed October 29, 2010.

Walsh, M.K., C. Whitlock, and P.J. Bartlein

- 2008 A 14,300-Year-Long Record of Fire-Vegetation-Climate Linkages at Battleground Lake, Southwestern Washington. *Quaternary Research* (70):251-264.

Washington State Department of Transportation

- 2003 Route Development Plan, State Route 99 North/Aurora Avenue North, From the North end of the Battery Street Tunnel (Mile Post 32.44) to N. 145th Street (Mile Post 40.47). March. Electronic document, http://www.wsdot.wa.gov/NR/rdonlyres/17DF1C94-C244-48EA-978E-0F91153C815A/0/SR_99_NorthFinalReport.pdf, accessed November 10, 2010.

Appendix A

Record of Consultation



KING COUNTY

Road Services Division

Department of Transportation

KSC-TR-0231

201 South Jackson Street

Seattle, WA 98104-3856

September 2, 2010

Phil Segami
Assistant Local Programs Engineer
Northwest Region
Washington State Department of Transportation
P. O. Box 330310
Olympia, WA 98133-9710

RE: Federal Aid Project Number CM-2017(110)
Agreement No. LA 7150
Lake to Sound Trail (CIP R43043)
National Historic Preservation Act Section 106 –APE

Dear Mr. Segami:

With this letter the King County Department of Transportation Road Services Division (RSD) is initiating the National Historic Preservation Act Section 106 process for the Lake to Sound Trail Project. This letter provides to you the project scope and information regarding the proposed Area of Potential Effect (APE). This project has federal funds and the Federal Aid Project Number is CM-2017(110). The information contained in this letter will assist you in your transmittal to the Washington State Department of Archaeology and Historic Preservation (DAHP) and in the Federal Highway Administration's initiation of Tribal consultation, as required under Section 106 of the National Historic Preservation Act. We respectfully request copies of correspondence with the DAHP and the Tribes for our records.

Project Purpose: The Lake to Sound (L2S) Trail System consists of 17 miles of planned regional trail for use as a multi-purpose, non-motorized route. (See the attached Project Vicinity Map, Figure 1). This effort to connect Lake Washington to Puget Sound is a joint partnership between the cities of SeaTac, Renton, Tukwila, Burien, and Des Moines, in coordination with King County. Planning for the entire L2S Trail system is complete and many segments have already been constructed. Two specific sections, Segments A and B, that are described below were selected to receive a 2009 King Countywide STP/CMAQ Non-Motorized grant. These two segments are critical linkages in the L2S Trail System and still need to be designed and constructed. The scope of work for completing these two segments consists of environmental analysis, permitting, administration, and professional engineering/design.

Project Location: The entire 17-mile regional trail would link Lake Washington to Puget Sound, beginning in the City of Renton, moving through Tukwila, SeaTac, Burien and Des Moines. It would link the Cedar River, the Green River, the Westside and the Des Moines Creek Trails. Please see the attached Figure 2 showing the entire corridor route, the cities and the location of Segments A and B.

Segment A provides the connection between the cities of Renton and Tukwila, and begins on the east at the crossing of the Burlington Northern Santa Fe Rail Corridor at Naches Avenue. Segment A's western terminus is at the crossing of the Green River Trail by the rail corridor at Fort Dent Park. Segment B is located entirely on the east side of Des Moines Memorial Drive beginning at the north in the City of SeaTac at South 156th Street and ending at South Normandy Road in Burien.

Project Description: The following provides a brief description of Segments A and B.

Segment A - Naches Avenue to Fort Dent Park: Segment A will provide connectivity between the cities of Renton and Tukwila, two of the region's most rapidly-growing urban areas, as well as a safe connection under heavy rail lines, which are a barrier today. This segment will provide connections to a larger trail network in South King County, including the Green River Trail and the Interurban Trail. This connection would also serve to provide access to major transit stations including the Sounder Commuter Rail Station and LINK Light Rail Station.

Segment B - Des Moines Memorial Drive (Cities of SeaTac and Burien): Segment B will extend along the east side of Des Moines Memorial Drive from South 156th Street at the north in the City of SeaTac to South Normandy Road in the City of Burien. The north end of this segment will connect to the existing Westside Trail, which further connects to North SeaTac Park and to the existing bike lanes and sidepath running east-west on South 156th Street. This network includes connections to the Duwamish Trail to the north and with the Burien Town Square to the west. This connection would also serve to provide access to the LINK Light Rail Station.

Proposed Action: The vertical disturbance would be approximately two feet along Segment A. The vertical disturbance would also be approximately two feet along much of Segment B, except where adjacent to an open water feature, where deeper retaining walls or pilings may be required.

Segment A: The total length for this segment is approximately 5,175 linear feet or 0.98 mile of trail. The typical cross-section for this segment is shown on the attached Figure 3 and depicts a "Two-Way Multi-Use Trail" configuration. This configuration would consist of a 12-foot-wide paved section, bounded by 2-foot-wide soft shoulders and a 1-foot-wide clear zone on each side, resulting in an approximate 18-foot-wide trail. Prehistoric archaeological site 45-KI-483, which has previously been determined eligible

for the National Register of Historic Places, is located within the APE for Segment A. Please see attached Figure 3 – Typical Cross-Section for two-Way Multi-Use Trail.

Segment B. The total length for this segment is approximately 7,920 linear feet or 1.5 miles. The typical cross sections for this segment are shown on Figure 4. This configuration would be a two-way multi-use trail immediately adjacent to the east side of the street. The configuration would include a 12-foot-wide paved path at least 3 to 6 feet from the edge of the pavement to any obstructions. The 3 to 6 feet includes a shoulder and a clear zone. Please see attached Figure 4 – Typical Cross-Section for Sidepaths, Bike Lanes and Sidewalks.

Area of Potential Effect (APE): Before RSD initiates a comprehensive cultural resources survey, including subsurface probes, we are writing to obtain APE certification. The enclosed maps on Figures 5 and 6 focus on two areas:

1. The Archaeological APE: The Archaeological APE is defined as the zone affected by all potential vertical and horizontal ground disturbance associated with the project. These areas include 25 feet from the edge of the existing gravel trail for much of Segment A. For Segment B, it is the east edge of the road pavement to the Seattle Tacoma International Airport property line. Please see Figures 5A and 5B.
2. The Built Environment APE: The Built Environment APE is defined as the potential effects to the “local view corridor” from the project roadway from existing buildings within the vicinity of the roadway. Tall historic structures within 25 feet of the proposed route are included within the APE. Please note that there are no buildings to evaluate in the area of Segment A. See Figures 6A and 6B.

Project Schedule: The King County Department of Parks and Natural Resources is planning to advertise this project in early 2012. The project will be built in phases and depending on the final advertisement date and available funding the first phase of Segment B would take approximately six months.

The Lake to Sound Trail project team thanks you in advance for your participation in this project. If you have any questions, or need additional information, please call me at 206-296-3733.

Sincerely,



Tina Morehead
Senior Environmental Engineer
Environmental Unit

TM:mr

Phil Segami
September 2, 2010
Page 4

Enclosures:

Figure 1: Project Vicinity Map

Figure 2: Lake to Sound Trail Corridor Route

Figure 3: Typical Cross Section for the Two Way Multi-Use Trail – Segment A

Figure 4: Typical Cross Section for the Sidepaths, Bike Lanes and Sidewalks – Segment B

Figure 5A: Archaeological Area of Potential Effect Map – Section A

Figure 5B: Archaeological Area of Potential Effect Map – Section B

Figure 6A: Built Environment Area of Potential Effect Map – Section A

Figure 6B: Built Environment Area of Potential Effect Map – Section B

cc: Charlie Sundberg, Preservation Planner, Heritage and Preservation Planning
(w/ enclosures)
Susan Oxholm, Grants Administrator, CIP and Planning Unit
Tom Minichillo, Archaeologist/Cultural Resources Coordinator, CIP and
Planning Unit (w/ enclosures)
Ronda Strauch, Supervising Environmental Engineer, Environmental Unit
Jason Rich, Capital Project Manager, Parks CIP Unit (w/ enclosures)

Saved as: Segami - L2S - 081810 (APE)



**Washington State
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Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300

360-705-7000
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September 15, 2010

The Honorable Virginia Cross
Muckleshoot Tribe
39015 172nd Avenue SE
Auburn, Washington 98092

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SEP 20 2010

LOCAL PROGRAMS

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Chairperson Cross:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation.

FHWA and WSDOT would like to initiate government-to-government consultation for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800). WSDOT has entered into the environmental review phase of this project and will prepare documentation to support the determination of this project as a Documented Categorical Exclusion under the National Environmental Policy Act (NEPA). We are inviting your comments on the Area of Potential Effects (APE) for this project pursuant to 36 CFR 800.4.

Recognizing the government-to-government relationship that the Federal Highway Administration has with the tribe, FHWA will continue to play a key role in this project as the responsible federal agency. If this project requires a permit from the US Army Corps of Engineers (USACE), this consultation will also serve to meet their Section 106 responsibilities. However, since WSDOT has been delegated the authority from FHWA to initiate consultation and to directly manage the cultural resources studies as part of carrying out this undertaking you may contact FHWA at any time for assistance with the process and/or the undertaking.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of

The Honorable Virginia Cross
Muckleshoot Tribe
September 15, 2010
Page 2

Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A. As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's APE, and providing any key tribal contacts, is greatly appreciated. We are also inviting comments regarding any other tribal concerns the proposed project may raise. Please provide a response by 18 October 2010 so that we may discuss this undertaking and any of those identified areas of interest. Similar letters have been sent to the State Historic Preservation Officer and the Puyallup, Snoqualmie, Squaxin Island, and Yakama Indian Tribes. Should you have any questions about this project, please contact me at (360) 705-7879 or deboert@wsdot.wa.gov.

Sincerely,



Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

cc: Laura Murphy, Muckleshoot Cultural Resources, w/attachments
Karen Walter, Muckleshoot Natural Resources
Pete Jilek, FHWA, MS 40943

~~Ed Conyers, Northwest Region Local Programs Engineer, MS NB82-121~~



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310 Maple Park Avenue S.E.
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September 15, 2010

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LOCAL PROGRAMS

Dr. Allyson Brooks
Washington State Historic Preservation Officer
Department of Archaeology and Historic Preservation
PO Box 48343
Olympia, Washington 98504-8343

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Dr. Brooks:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation. As noted above this correspondence is intended to initiate consultation and provide you our definition of the Area of Potential Effects (APE), pursuant to 36 CFR 800.3 and 800.4 respectively.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A.

Dr. Allyson Brooks
Washington State Historic Preservation Officer
September 15, 2010
Page 2

As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

I look forward to your comments or input on any aspect of the APE or project undertaking by 18 October 2010. Analogous letters were sent to the Muckleshoot, Puyallup, Snoqualmie, Squaxin Island, and Yakama Indian Tribes. Please contact me at (360) 705-7879 or deboert@wsdot.wa.gov if you have any questions.

Sincerely,



Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

Enclosure

cc: Pete Jilek, FHWA, MS 40943

~~Ed Conyers, Northwest Region Local Programs Engineer, MS NB82-121~~



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September 15, 2010

The Honorable Harry Smiskin
Yakama Nation
PO Box 151
Toppenish, Washington 98948

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SEP 20 2010

LOCAL PROGRAMS

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Chairperson Smiskin:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation.

FHWA and WSDOT would like to initiate government-to-government consultation for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800). WSDOT has entered into the environmental review phase of this project and will prepare documentation to support the determination of this project as a Documented Categorical Exclusion under the National Environmental Policy Act (NEPA). We are inviting your comments on the Area of Potential Effects (APE) for this project pursuant to 36 CFR 800.4.

Recognizing the government-to-government relationship that the Federal Highway Administration has with the tribe, FHWA will continue to play a key role in this project as the responsible federal agency. If this project requires a permit from the US Army Corps of Engineers (USACE), this consultation will also serve to meet their Section 106 responsibilities. However, since WSDOT has been delegated the authority from FHWA to initiate consultation and to directly manage the cultural resources studies as part of carrying out this undertaking you may contact FHWA at any time for assistance with the process and/or the undertaking.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of

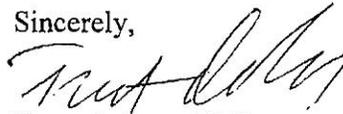
The Honorable Harry Smiskin
Yakama Nation
September 15, 2010
Page 2

Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A. As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's APE, and providing any key tribal contacts, is greatly appreciated. We are also inviting comments regarding any other tribal concerns the proposed project may raise. Please provide a response by 18 October 2010 so that we may discuss this undertaking and any of those identified areas of interest. Similar letters have been sent to the State Historic Preservation Officer and the Muckleshoot, Puyallup, Snoqualmie, and Squaxin Island Indian Tribes. Should you have any questions about this project, please contact me at (360) 705-7879 or deboert@wsdot.wa.gov.

Sincerely,



Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

cc: Kate Valdez, Yakama Tribal Historic Preservation Officer, w/attachments
Phillip Rigdon, Yakama Natural Resources
Pete Jilek, FHWA, MS 40943
Ed Conyers, Northwest Region Local Programs Engineer, MS NB82-121



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P.O. Box 47300
Olympia, WA 98504-7300

360-705-7000
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September 15, 2010

The Honorable David Lopeman
Squaxin Island Tribe
SE 10 Squaxin Lane
Shelton, Washington 98584

RECEIVED

SEP 20 2010

LOCAL PROGRAMS

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Chairperson Lopeman:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation.

FHWA and WSDOT would like to initiate government-to-government consultation for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800). WSDOT has entered into the environmental review phase of this project and will prepare documentation to support the determination of this project as a Documented Categorical Exclusion under the National Environmental Policy Act (NEPA). We are inviting your comments on the Area of Potential Effects (APE) for this project pursuant to 36 CFR 800.4.

Recognizing the government-to-government relationship that the Federal Highway Administration has with the tribe, FHWA will continue to play a key role in this project as the responsible federal agency. If this project requires a permit from the US Army Corps of Engineers (USACE), this consultation will also serve to meet their Section 106 responsibilities. However, since WSDOT has been delegated the authority from FHWA to initiate consultation and to directly manage the cultural resources studies as part of carrying out this undertaking you may contact FHWA at any time for assistance with the process and/or the undertaking.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of

The Honorable David Lopeman
Squaxin Island Tribe
September 15, 2010
Page 2

Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A. As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's APE, and providing any key tribal contacts, is greatly appreciated. We are also inviting comments regarding any other tribal concerns the proposed project may raise. Please provide a response by 18 October 2010 so that we may discuss this undertaking and any of those identified areas of interest. Similar letters have been sent to the State Historic Preservation Officer and the Muckleshoot, Puyallup, Snoqualmie, and Yakama Indian Tribes. Should you have any questions about this project, please contact me at (360) 705-7879 or deboert@wsdot.wa.gov.

Sincerely,



Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

cc: Rhonda Foster, Squaxin Island T. H. P. O., w/attachments
Andy Whitener, Squaxin Island Natural Resources
Pete Jilek, FHWA, MS 40943

~~Ed Conyers, Northwest Region Local Programs Engineer, MS NB82-121~~



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Olympia, WA 98504-7300

360-705-7000
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September 15, 2010

The Honorable Shelley Burch
Snoqualmie Nation
PO Box 969
Snoqualmie, Washington 98065

RECEIVED

SEP 20 2010

LOCAL PROGRAMS

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Chairperson Burch:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation.

FHWA and WSDOT would like to initiate government-to-government consultation for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800). WSDOT has entered into the environmental review phase of this project and will prepare documentation to support the determination of this project as a Documented Categorical Exclusion under the National Environmental Policy Act (NEPA). We are inviting your comments on the Area of Potential Effects (APE) for this project pursuant to 36 CFR 800.4.

Recognizing the government-to-government relationship that the Federal Highway Administration has with the tribe, FHWA will continue to play a key role in this project as the responsible federal agency. If this project requires a permit from the US Army Corps of Engineers (USACE), this consultation will also serve to meet their Section 106 responsibilities. However, since WSDOT has been delegated the authority from FHWA to initiate consultation and to directly manage the cultural resources studies as part of carrying out this undertaking you may contact FHWA at any time for assistance with the process and/or the undertaking.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of

The Honorable Shelley Burch
Snoqualmie Nation
September 15, 2010
Page 2

Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A. As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's APE, and providing any key tribal contacts, is greatly appreciated. We are also inviting comments regarding any other tribal concerns the proposed project may raise. Please provide a response by 18 October 2010 so that we may discuss this undertaking and any of those identified areas of interest. Similar letters have been sent to the State Historic Preservation Officer and the Muckleshoot, Puyallup, Squaxin Island, and Yakama Indian Tribes. Should you have any questions about this project, please contact me at (360) 705-7879 or deboert@wsdot.wa.gov.

Sincerely,

Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

cc: Ray Mullen, Snoqualmie Cultural Resources, w/attachments
Cindy Spiry, Snoqualmie Natural Resources
Pete Jilek, FHWA, MS 40943
~~Rd Conyers, Northwest Region Local Programs Engineer, MS NB82-121~~



**Washington State
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Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300

360-705-7000
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September 15, 2010

The Honorable Herman Dillon, Sr.
Puyallup Tribe
3009 Portland Avenue
Tacoma, Washington 98404

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SEP 20 2010
LOCAL PROGRAMS

**King County
Lake to Sound Trail Project
Initiation of Section 106 // APE
Fed Aid # CM-2017(110)**

Dear Chairperson Dillon:

King County is proposing to construct a trail with funding from the Federal Highway Administration (FHWA). The Washington State Department of Transportation (WSDOT) Highways and Local Programs Division is assisting the County and acting on behalf of the FHWA in processing federal environmental compliance documentation.

FHWA and WSDOT would like to initiate government-to-government consultation for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800). WSDOT has entered into the environmental review phase of this project and will prepare documentation to support the determination of this project as a Documented Categorical Exclusion under the National Environmental Policy Act (NEPA). We are inviting your comments on the Area of Potential Effects (APE) for this project pursuant to 36 CFR 800.4.

Recognizing the government-to-government relationship that the Federal Highway Administration has with the tribe, FHWA will continue to play a key role in this project as the responsible federal agency. If this project requires a permit from the US Army Corps of Engineers (USACE), this consultation will also serve to meet their Section 106 responsibilities. However, since WSDOT has been delegated the authority from FHWA to initiate consultation and to directly manage the cultural resources studies as part of carrying out this undertaking you may contact FHWA at any time for assistance with the process and/or the undertaking.

The Lake to Sound Trail is a 17-mile-long trail located in King County that connects Lake Washington to the Puget Sound (see attached map). Portions of the trail have already been constructed and the proposed project would construct segments A and B of the trail. Segment A (approximately 5,175 feet in length) would connect the cities of

The Honorable Herman Dillon, Sr.
Puyallup Tribe
September 15, 2010
Page 2

Renton to Tukwila, beginning at Naches Avenue and terminating at Fort Dent Park. Segment B (approximately 7,920 feet in length) would connect the cities of SeaTac and Burien, beginning at South 156th Street and extending along the east side of Des Moines Memorial Drive to terminate at South Normandy Road. In both cases, the trail would consist of a 12-foot-wide paved section. The Segment A portion would include two-foot-wide soft shoulders with a one-foot-wide clear zone on each side, resulting in an 18-foot total trail width. Retaining walls or pilings may be required along a portion of Segment B that is adjacent to an open water feature.

The APE is defined as the footprint of the construction items listed above, which is approximately 25 feet in total width. Estimated depth of ground disturbance is less than two feet in depth except where retaining walls or pilings are required. Site 45KI438 (the White Lake Site), a prehistoric archaeological site that has been determined to be eligible for listing in the National Register of Historic Places, lies within the APE of Segment A. As part of the scope of work for the project survey, boundaries and depths of fill within the APE will be positively defined. Based upon these findings, recommendations will be made by the consultant in the survey report on the most prudent and feasible avoidance alternatives.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's APE, and providing any key tribal contacts, is greatly appreciated. We are also inviting comments regarding any other tribal concerns the proposed project may raise. Please provide a response by 18 October 2010 so that we may discuss this undertaking and any of those identified areas of interest. Similar letters have been sent to the State Historic Preservation Officer and the Muckleshoot, Snoqualmie, Squaxin Island, and Yakama Indian Tribes. Should you have any questions about this project, please contact me at (360) 705-7879 or deboert@wsdot.wa.gov.

Sincerely,



Trent de Boer, RPA
WSDOT Archaeologist
Highways & Local Programs Division

TDB:ac

cc: Brandon Reynon, Puyallup Cultural Resources, w/attachments
Bill Sullivan, Puyallup Natural Resources
Pete Jilek, FHWA, MS 40943

~~Trent de Boer, Northwest Region Local Programs Engineer, MS NB82-121~~



STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

September 28, 2010

Mr. Trent de Boer
Archaeologist
WSDOT, Highways & Local Programs
PO Box 47390
Olympia, WA 98504-7390

Hwys & Local Programs

SEP 29 2010

Olympia, WA

In future correspondence please refer to:

Log: 092810-19-FHWA
Property: Lake to Sound Trail
Re: Archaeology - APE Concur

Dear Mr. de Boer:

We have reviewed the materials forwarded to our office for the Lake to Sound Trail project. Thank you for your description of the area of potential effect (APE). We concur with the definition of the APE. We look forward to the results of your cultural resources survey efforts, your consultation with the concerned tribes, and receiving the survey report. We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Lance Wollwage, Ph.D.
Transportation Archaeologist
(360) 586-3536
lance.wollwage@dahp.wa.gov

Appendix B

Photographs



Photo 14. Overview of pavement and buried utility disturbance looking north along Des Moines Memorial Drive from the intersection of South 160th Street.



Photo 15. Overview of pavement and buried utility disturbance looking south along Des Moines Memorial Drive from the intersection of South 160th Street.



Photo 35. View of ST-8 location near crew member. Looking north on Des Moines Memorial Drive across the street from Sunnydale School.



Photo 36. Pre contact artifacts recovered from fill in ST-8.



Photo 39. Modern debris recovered from the same context and context below the pre contact artifacts from ST-8.



Photo 52. Overview of pavement, buried utility disturbance, and steep shoulder looking north along Des Moines Memorial Drive from the intersection of South 176th Street.

Appendix C

Historic Property Inventory Forms



Historic Inventory Report

Location

Field Site No. _____ DAHP No. _____

Historic Name:

Common Name: Chevron

Property Address: 15804 Des Moines Memorial Dr S, SeaTac, WA 98148

Comments:

Tax No./Parcel No. 2023049283

Plat/Block/Lot

Acreage

Supplemental Map(s) _____

Township/Range/EW	Section	1/4 Sec	1/4 1/4 Sec	County	Quadrangle
T23R04E	20			King	DES MOINES

Coordinate Reference

Easting: 1189469

Northing: 781374

Projection: Washington State Plane South

Datum: HARN (feet)

Identification

Survey Name: King County Lake to Sound Trail, Segment B Date Recorded: 11/21/2010

Field Recorder: Hetzel, Christopher

Owner's Name: Amans, Inc.

Owner Address:

City:

State:

Zip:

Classification: Building

Resource Status:

Comments:

Survey/Inventory

Within a District? No

Contributing? No

National Register:

Local District:

National Register District/Thematic Nomination Name:

Eligibility Status: Not Determined - SHPO

Determination Date: 1/1/0001

Determination Comments:



Historic Inventory Report

Description

Historic Use: Transportation - Road-Related (vehicular)	Current Use: Transportation - Road-Related (vehicular)		
Plan: Rectangle	Stories: 1		
Changes to Plan: Intact	Structural System: Platform Frame		
Changes to Original Cladding: Extensive	Changes to Interior: Unknown		
Changes to Other: Moderate	Changes to Windows: Extensive		
Other (specify): New canopy.			
Style: Modern	Cladding: Wood - Vertical Veneer - Stucco	Roof Type: Flat with Parapet	Roof Material: Asphalt / Composition
Foundation: Concrete - Poured	Form/Type: Gas Station - Convenience Store w/Canopy		

Narrative

Study Unit	Other
Architecture/Landscape Architecture	
Date of Construction: 1959	Built Date
	Builder:
	Engineer:
	Architect:

Property appears to meet criteria for the National Register of Historic Places: No
 Property is located in a potential historic district (National and/or local): No
 Property potentially contributes to a historic district (National and/or local): No

Statement of Significance: The property was evaluated at a reconnaissance level in a cultural resources survey completed for the proposed proposed King County Lake to Sound Trail, Segment B project in the City of Seatac, King County, Washington. It was constructed in 1959, according to the King Count tax assessor. It was originally constructed as an automobile service station, but was substantially altered when it was converted for use as a gas station and convenience store. It is currently occupied by Chevron. The original owner is unknown, as are the original architect and builder. Substantial changes have been made to the building's facade and interior spaces, including the removal, replacement, and reconfiguration of its door and window openings and the removal of original auto service bays. Because of these alterations, the building's integrity is considered poor. The property has been evaluated according to the eligibility criteria for listing in the National Register of Historic Places (NRHP). The reconnaissance-level survey revealed no evidence to suggest the building is historically significant due to associations with an important event or person. The building is representative of an automobile service station from the late 1950s in a Modern style. However, it has lost integrity and does not appear to otherwise embody characteristics or a method of construction that would warrant special recognition, and it is not located in a cohesive neighborhood or grouping. Based on our review, the property has poor integrity and does not appear eligible for listing in the NRHP individually or as a contributor to a potential historic district.



Historic Inventory Report

Description of Physical Appearance:	The property contains a one-story automotive service station, which has been converted for use as a gas station and convenience store. It has a south-north orientation with a tall, non-original gas pump canopy to the west and is surrounded by a paved parking area on all sides. The building has an rectangular plan and consists of a combination of platform frame and masonry construction. It has a flat roof with an applied cornice at the front and side elevations. The exterior walls are finished with non-original vertical-board wood siding and stucco. The primary (west) facade is asymmetrical and divided into two sections. It was substantially altered when the building was converted for use as a convenience store. The northernmost section was altered by the removal and enclosure of the original fenestration. The facade's southern section was similarly altered with the removal of original storefront doors and windows and the installation of the existing, non-original, metal frame windows and door.
Major Bibliographic References:	King County Tax Assessor Online Records.

Photos



West Elevation, Looking Southeast
2010



West Elevation, Looking Southeast
2010



South Elevation, Looking North
2010



Historic Inventory Report

Location

Field Site No. _____ DAHP No. _____
Historic Name: Des Moines Memorial Drive
Common Name: Des Moines Memorial Drive
Property Address: Segment of Des Moines Memorial Drive S , SeaTac, WA 98148
Comments:
Tax No./Parcel No.
Plat/Block/Lot
Acreage
Supplemental Map(s) _____

Township/Range/EW	Section	1/4 Sec	1/4 1/4 Sec	County	Quadrangle
T23R04E	29			King	DES MOINES

Coordinate Reference

Easting: 1188744
Northing: 778858
Projection: Washington State Plane South
Datum: HARN (feet)

Identification

Survey Name: King County Lake to Sound Trail, Segment B Date Recorded: 11/21/2010
Field Recorder: Hetzel, Christopher
Owner's Name:
Owner Address:
City: _____ State: _____ Zip: _____
Classification: Site
Resource Status: _____ Comments:
Survey/Inventory
Within a District? No
Contributing? No
National Register:
Local District:
National Register District/Thematic Nomination Name:
Eligibility Status: Not Determined - SHPO
Determination Date: 1/1/0001
Determination Comments:



Historic Inventory Report

Description

Historic Use: Transportation - Road-Related (vehicular)	Current Use: Transportation - Road-Related (vehicular)		
Plan: None	Stories: 0		
Changes to Plan: Not Applicable	Structural System: None		
Changes to Original Cladding: Not Applicable	Changes to Interior: Not Applicable		
Changes to Other: Not Applicable	Changes to Windows: Not Applicable		
Other (specify):			
Style:	Cladding:	Roof Type:	Roof Material:
None	None	None	None
Foundation:	Form/Type:		
None	None		

Narrative

Study Unit	Other
Social Movements/Organizations	
Military	
Architecture/Landscape Architecture	
Date of Construction:	1922 Built Date
	Builder:
	Engineer:
	Architect:

Property appears to meet criteria for the National Register of Historic Places: No
 Property is located in a potential historic district (National and/or local): No
 Property potentially contributes to a historic district (National and/or local): No

Statement of Significance: Des Moines Memorial Drive was evaluated at a reconnaissance level in a cultural resources survey completed for the proposed King County Lake to Sound Trail, Segment B project in the City of Seatac, King County, Washington. It appears ineligible for listing in the National Register of Historic Places (NRHP), due to loss of integrity. The memorial drive was originally established in 1921-1922 as a World War I commemorative property. Under NRHP Criterion Consideration F, such a property must possess significance based on its own value, apart from its commemorative value. The Des Moines Memorial Drive is believed to be the only World War I memorial of this type in Washington State; it is the only one known to have selected the elm (reminiscent of France alleys) as its memorial tree; and it is the only memorial to have designated individual trees to individual fallen soldiers. Despite these characteristics, only 230 of the original 1,208 memorial elm trees remain in existence and nearly all of the original plantings and landscaping have been removed or altered. The memorial drive has also been subject to numerous road improvements and other projects, which have impacted its integrity. Although the Des Moines Memorial Drive continues to be recognized by residents of surrounding communities, it does not appear to retain sufficient integrity to convey historical significance related to its own design, age, tradition, or symbolic value, separate from the event it memorializes.

Historic Inventory Report

As a primary transportation route, the road that was eventually dedicated as Des Moines Memorial Drive was first established in the 1870s as Kelly Road, connecting the City of Seattle with what would become the community of Sunnysdale. Kelly Road was originally a dirt and gravel thoroughfare, which was often impassible in the rainy season, but served area residents through the turn of the twentieth century (Balzarini 1972:34). With growth of Sunnysdale and other communities, the northern 9.6 miles of Kelly Road were improved with brick paving beginning in June 1916, and the road was extended south to reach the community of Des Moines (Rood et al. 2004; Balzarini 1972:34; Dorpat and Crowley 2003; Kennedy 1989:27). Renamed High Line Road and designated as Permanent County Highway No. 14 at this time, many of its previously existing curves were straightened and low-lying areas filled in (Rood et al. 2004; Balzarini 1972:43; Kennedy 1989:28). Although infamously slippery when wet, this improvement opened the area to increased traffic and settlement (Balzarini 1972:43; Kennedy 1989:28; Valley View Library 2007). Shortly thereafter, the road was further extended to reach Tacoma; and by the 1920s it was the shortest and most traveled route between Tacoma and Seattle (Highline Historical Society 2010; Kennedy 1989:28). Despite these transportation improvements, the Sunnysdale area remained rural well into the mid-nineteenth century (League of Women Voters of South King County 1973:2).

This effort involved the dedication of an 11-mile stretch of road from South Park in Seattle to areas south of the City of Des Moines as the Des Moines Memorial Drive, and the planting of 1,208 memorial elm trees, wildflowers, and other landscaping. The Des Moines Memorial Drive was one of the very first "Living Road of Remembrance" projects in the United States, which was a nationwide movement promoted by several national organizations and by President Harding.

At the end of World War I, residents of King County sought to honor the thousands of soldiers who had given their lives during the conflict by establishing a "Living Road of Remembrance" along High Line Road. First conceived by Colonel F.W. Galbraith, Jr., a resident of Vandalia, Ohio, the creation of a living memorial to fallen veterans was part of a nationwide movement, promoted by several national organizations and by President Harding, and being pursued by many communities across the country. Planting a tree in his home state, Galbraith called for "all state Legion organizations to push for memorial tree planting" (Kennedy 1989:141). Soon, the American Forestry Association championed Galbraith's idea, suggesting that the living memorials be called "Roads of Remembrance." Answering these pleas, Lillian Gustin McEwan, president of the Seattle Garden club and wife of a Seattle lumber pioneer, developed the idea of making High Line Road into a memorial by lining it with trees dedicated to World War I veterans. McEwan reached out to the community and found undeniable support (Highline Historical Society 2010; Kennedy 1989:141).

On November 11, 1921, Armistice Day commemorating the end of World War I, High Line Road was first dedicated as a Living Road of Remembrance honoring those who gave their lives in World War I, and McEwan directed the planting of the memorial's first 25 elm trees. The road began to be referred to as Memorial Way at this time (Rood et al. 2004).

On January 14, 1922, High Line Road was re-dedicated in a ceremony held at Sunnysdale Elementary School. Renaming the route Des Moines Memorial Drive, the planting of 1,208 elm trees was initiated along an 11-mile stretch of the road from South Park in Seattle to areas south of the City of Des Moines. Wildflowers were seeded under the trees and along the road, then a two-lane brick corridor, in an effort to resemble tree-lined roads in France (Rood et al. 2004:ES-1). The ceremony was well attended with veterans, Garden Club members, local pioneers, a University of Washington football star, two World War I French generals, the American Legion, interested local residents and the state Lieutenant Governor all present (Rood et al. 2004:ES-1; Kennedy 1989:141-143). Each tree along the route commemorated an individual World War I veteran and was to be registered in the American Forestry Association's "National Honor Roll of Memorial Trees" (Balzarini 1972:84-88; Highline Historical Society 2010; Kennedy 1989:141-143).

Over the years, time has taken its toll on the Des Moines Memorial Drive trees. Only 230 of the original elms remain today, based on a corridor management plan completed for the memorial drive in 2004 (Rood et al. 2004). Some of the trees have succumbed to death from Dutch Elm disease, were pruned severely due to the presence of overhead utility lines, or had to be removed due to unavoidable expansion or alterations needed for the road or utilities (Balzarini 1972:86; Highline Historical Society 2010; Kennedy 1989:143). Although a few trees have been replanted over the years, the deterioration of the memorial trees has long been an important concern of the community. In response, King County and other parties joined together to establish a memorial shrine to honor veterans in the early 1960s (Rood et al. 2004). Dedicated on September 15, 1963, an 84-foot long wall of rose-colored granite was engraved with an elm tree and names of 1,428 King County servicemen who gave their lives in World War I. The memorial was installed in front of Sunnysdale Elementary School on the southwest corner of South 156th Street and Des Moines Memorial Drive (Balzarini 1972:88; Highline Historical Society 2010; Kennedy 1989:143-144).

Subsequent plans for the preservation and improvement of the memorial drive and the remaining elms have been undertaken by many local advocates and public officials, beginning in the 1970s and continuing through the present. These efforts culminated in the King County Public Works Department planting 61 flowering crabapples and three blossoming cherries between South 130th and South 160th in 1982, and the Southwest King County Arts Council nominating Des Moines Way South for King County Landmark status. The nomination was unsuccessful, but on December 3, 1984 the King County Council passed Ordinance #7041 renaming Des Moines Way South Des Moines Memorial Drive (Rood et al. 2004).

Later, in June 1999, King County Councilman Chris Vance secured financial support for a major restoration of the memorial drive. This led to the formal execution of an interlocal agreement between the Cities of Des Moines, Normandy Park, Seatac, and Burien, and King County and the Port of Seattle in support of the project and formalizing the creation of the Des Moines Memorial Drive Restoration Committee. The committee also included representatives from American Legion Posts, VFW, utility companies, community historical societies and interested citizens. The committee's focus was to restore the memorial aspects of the historic Memorial Way as well as technical improvements required by the roadway. In 2001, the committee initiated a study of the memorial drive that concluded with the production of a comprehensive corridor management plan (Rood et al. 2004).



Historic Inventory Report

Description of Physical Appearance:	<p>The original Des Moines Memorial Drive consisted of an 11-mile stretch of road from South Park in Seattle to areas south of the City of Des Moines, and the planting of 1,208 American elm trees, wildflowers, and other landscaping. The American elm trees were placed at regular 80 eighty foot intervals and 44, on opposite sides of a 24 foot, 2-lane red brick road that began at the southern City of Seattle corporate boundary and extending through Sunnydale, an early “highline” community, and the town of Des Moines and then to the Pierce/King County line. Beneath the elm trees, wildflowers (including poppies, forget-me-nots, ragged robin and foxglove) were seeded along the shoulders of the roadway. Stakes were used to secure each of the young Elm trees. Memorial plaques were placed along the route, to commemorate the memorial and early planting ceremonies. Of the original 1,208 elm trees planted, only about 230 elm trees exist today. These are scattered in clusters along the extent of the memorial drive, which now consists of a modern, concrete paved two-lane road. A total of eight trees remain intact along the segment of road between South 160th Street and South 171st Street. In addition to the original memorial drive, other features that have attained importance as components of the memorial include the Memorial Plaza and Des Moines Memorial Park at Sunnydale School, where etched stone panels bear the names of the fallen World War I veterans and there are dedication plaques, a time capsule, a number of other memorial trees from different wars. A flagpole triangle also exists at the intersection of Des Moines Memorial Drive and Marine View Drive, dedicated to honoring all veterans.</p>
Major Bibliographic References:	<p>Balzarini, E. Our Burien. Seattle, Washington: King County Library System, 1972.</p> <p>Dorpat, P. and W. Crowley. SeaTac – Thumbnail History. 31 May 2003. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=4181, accessed October 29, 2010.</p> <p>Highline Historical Society. Des Moines Memorial Way – Road of Remembrance. Electronic document, http://www.highlinehistory.org/des_moines_drive_english.html, accessed November 9, 2010.</p> <p>League of Women Voters of South King County. Sea-Tac and Its Neighbors. Seattle, Washington: League of Women Voters of South King County, 1973.</p> <p>Rood, J., S. Black, A. Rapelje, R. Watland, and B. Balberdi. Des Moines Memorial Drive, Corridor Management Plan, With Rehabilitation and Enhancement Guidelines. WWI Living Road of Remembrance, Washington State, 2004. Prepared for Kin County, City of Burien, City of Des Moines, City of Normandy Park, and City of Seatac. Prepared by SB & Associates, Inc. Electronic document, http://roadofremembrance.org/Documents/DMMD%20Final.pdf, accessed November 10, 2010.</p> <p>Kennedy, R. T. One Hundred Years of the “Waterland” Community: A History of Des Moines, Washington. Grechen F. Schmidt, ed. Des Moines, Washington: City of Des Moines, 1989.</p> <p>Kennedy, R. T. One Hundred Years of the “Waterland” Community: A History of Des Moines, Washington. Grechen F. Schmidt, ed. Des Moines, Washington: City of Des Moines, 1989.</p> <p>Valley View Library. History of City of SeaTac. 26 June 2007. Electronic document, http://www.kcls.org/valleyview/history.cfm, accessed October 29, 2010.</p>

Photos



Elm trees on east side of Des Moines Memorial Drive, looking northeast
2011



Elm trees on east side of Des Moines Memorial Drive, just north of SR 509, looking northeast
2011



Elm tree on east side of Des Moines Memorial Drive, just north of SR 509 overpass, looking northeast
2011



Elm tree locations in vicinity of SR 509 overpass
2011

Appendix D

Shovel Test Descriptions

Shovel Test Descriptions – Lake to Sound Trail Segment B

Shovel Test	Depth (cmbs)	Color	Sediment Description	Interpretation	Cultural Materials
1	0–20	Grayish brown	Sandy fine silt with some angular road gravels		<i>Modern</i> : colorless glass fragments
	20–30	Brownish red	Silty sand with organics and roots		
	30–50	Light brown	Fine sand with some round gravels (ranging in size from 2 inches in diameter to pea-sized); no laminations, unsorted		
	50+	Light brown	Sandy gravel; too compact to penetrate		
2	0–16	Dark brown	Fine silt with organics and numerous 0.25-inch diameter roots		
	16–92	Brownish red	Silty fine sand with no gravels; some 0.25-inch diameter roots in the upper 20 centimeters		
	92–100+	Gray	Very fine silt, oxidized	Glacial outwash	
3	0–19	Dark brown to black	Medium grain silt with some angular road gravel		
	19–60+	Brownish red	Sandy silt with a few rootlets; concrete encountered at 50 cmbs, covering west half of shovel probe preventing further excavation	fill	<i>Modern</i> : 2 wire nails
4	0–20	Dark brownish gray	Sandy silt with angular road gravels		
	20–66	Brownish red	Medium grain sandy silt, some 0.25-inch roots, and pockets of surface sediments at bottom		
	66–70+	Gray	Fine sandy silt; oxidized; became extremely hard and compact, preventing further excavation	Glacial outwash	

Shovel Test	Depth (cmbs)	Color	Sediment Description	Interpretation	Cultural Materials
5	0-33+	Brownish gray	Sandy silt with organics and rootlets; dense tree roots at 33 cmbs preventing further excavation; water table reached at 20 cmbs		<i>Modern:</i> plastic
6	0-30	Light to medium gray	Silty sand, angular and rounded gravels, concrete chunks, and one brick fragments; at 30 cmbs the soil became hard, preventing further excavation		
7	0-13	Brownish gray	Fine sandy silt with rootlets and angular gravel		<i>Modern:</i> 1 clear, flat glass fragment
	13-60	Brownish red	Fine sandy silt with a few 0.25-inch roots and charcoal fragments		
	60-73	Gray	Very fine silt, oxidized, no laminations, water table reached at 70 cmbs; became extremely hard and compact, preventing further excavation	Glacial outwash	
8	0-13	Brownish gray to red	Angular gravel with some medium grain sands		
	13-40	Brownish gray with red mottling	Medium grained sand, very compact, charcoal flecks throughout but unsorted		<i>Pre contact:</i> 1 white opaque/clear CCS shatter, 1 red basalt flake; <i>Modern:</i> 3 amber glass fragments, 5 colorless glass fragments, 1 plastic, 1 wire nail
	40-60	Brownish red	Medium grain sand fine silt, looser, smaller charcoal fragments, a few 0.25-inch roots		<i>Modern:</i> 2 colorless glass fragments
	60-103+	Light brownish red	Medium and fine grained sand, some 0.25-inch roots, looser, not compact, no gravel present		

Shovel Test	Depth (cmbs)	Color	Sediment Description	Interpretation	Cultural Materials
9	0-10	Black	Sandy silt with organics		
	10-24	Light brownish red	Silty medium-grained sand, compact, charcoal flecks and rootlets at top		<i>Modern: 2 amber, 3 colorless glass fragments</i>
	24-48	Brownish gray	Medium-grain sand fine silt, a few rootlets at top, moderately compact		
	48-64	Brownish red	Medium grain sandy fine silt, less compact than the above layer, 0.25-inch roots present		
	64-100+	Brownish gray to red	Medium grain sand fine silt, loose, 0.25-inch root (same as above with slight color change)		
10	0-18	Black to brown	Fine sandy silt with rootlets and angular gravels		
	18-54	Brownish gray	Medium grain sand fine silt, compact, charcoal flecks and a few small (0.10-inch) roots		<i>Modern: glass fragments (11 green, 7 colorless, 3 amber), a pink plastic, 1 straw fragments, 4 asbestos fragments, 1 plastic wrapper</i>
	54-101+	Brownish red	Medium grain sand fine silt, looser, a few 0.25-inch roots		

cmbs = centimeters below surface; CCS = cryptocrystalline silicate.

Appendix E

Archaeological Isolate Inventory Form



STATE OF WASHINGTON

ARCHAEOLOGICAL ISOLATE INVENTORY FORM

Smithsonian Number:

***County:** King

***Date:** 11/09/10 ***Compiler:** Kurt Perkins

ISOLATE DESIGNATION

Isolate Name: NA

Field/ Temporary ID: 803.10-1

***Site Type:** Pre Contact Lithic Isolate

ISOLATE LOCATION

***USGS Quad Map Name:** Des Moines 7.5' USGS Quadrangle

***Legal Description:** T23 N R 4E: **Section(s):** 20

Quarter Section(s): NW of the NW of the SW of the SE

***UTM: Zone 10 Easting 550999 Northing 5256784**

Latitude: NA **Longitude:** NA **Elevation (FT/M):** 280 ft

Other Maps: NA **Type:** NA

Scale: NA **Source:** NA

Drainage, Major: Puget Sound **Drainage, Minor:** Miller Creek **River Mile:** NA

Aspect: West **Slope:** 0%

***Location Description (General to Specific):** The isolate is located in the town of SeaTac, Washington just west of SeaTac International Airport. The isolate is located along the east side of the right-of-way of Des Moines Way South between 156th Way and 157th Place between the road and the fence line. The isolate is located in a grassy area in an area that has been leveled and disturbed by the placement of above-ground utility lines.

Approach (For Relocation Purposes): From downtown Seattle head south on WA-99S for 4 miles until it merges with WA-509 and continue for another 6 miles. Take the 160th Street exit and go 0.2 miles. Turn left at South 160th Street and proceed 0.3 mi. Turn left onto Des Moines Memorial Way go 0.2 miles. The isolate is located between 156th Way and 157th Place on the east side of the road about 15 meters south of a power pole.

ISOLATE DESCRIPTION

***Narrative Description:** The isolate consists of a single core reduction flake made from a red fine-grained volcanic material, possibly basalt or rhyolite. The isolate is a fairly intact flake with a bulb of percussion and a feathered termination. The flake was recovered from a shovel test (ST 8) conducted as part of the cultural resources survey for the Lake to Sound Trail project). The shovel test revealed a heavily disturbed area, with modern glass, plastic, and one nail found within the shovel test pit above and below the flake.

***Vegetation (On Site):** Blackberry, alder, willow, pine, various grasses

Local: *Tsuga heterophylla*

Regional: *Tsuga heterophylla*

Landforms (On Site): Plain

Local: plain

Water Resources (Type): Miller Creek

Distance: 75 m

Permanence: Permanent

***Method of Collection(s):** Not collected

***Location of Artifacts (Temporary/Permanent):** NA

ISOLATE AGE

***Component:** Pre Contact

***Dates:** Unknown

***Dating Method:** Typology

Phase: Unknown

Basis for Phase Designation: Typology

ISOLATE RECORDERS

Observed by: Kurt Perkins and Melissa Cascella **Address:** 710 2nd Ave Suite 550
 ***Date Recorded:** 10/26/10 Seattle, WA 98104
 ***Recorded by (Professional Archaeologist):** Melissa Cascella, MA
 ***Affiliation:** ICF International ***Affiliation Phone Number:** 206-801-2818
 ***Affiliation Address:** Same ***Affiliation E-mail:** mcascella@icfi.com
Date Revisited: NA **Revisited By:** NA

ISOLATE HISTORY

Previous Work (Done on Area Where Isolate was Found): NA

LAND OWNERSHIP

***Owner:** King County
 ***Address:** NA
 ***Tax Lot/ Parcel No:** transportation right of way

RESEARCH REFERENCES

***Items/Documents Used In Research (Specify):** NA

USGS MAP

***Quad Name:** Des Moines

***Series:** 7.5' USGS Quadrangle

***Date:** 1995

[*INSERT 7.5 MIN USGS MAP](#)

HIGHLIGHTING ISOLATE LOCATION

PHOTOGRAPH(S)

***Photograph Description(s):**



Shovel Test Pit No. 8 in progress



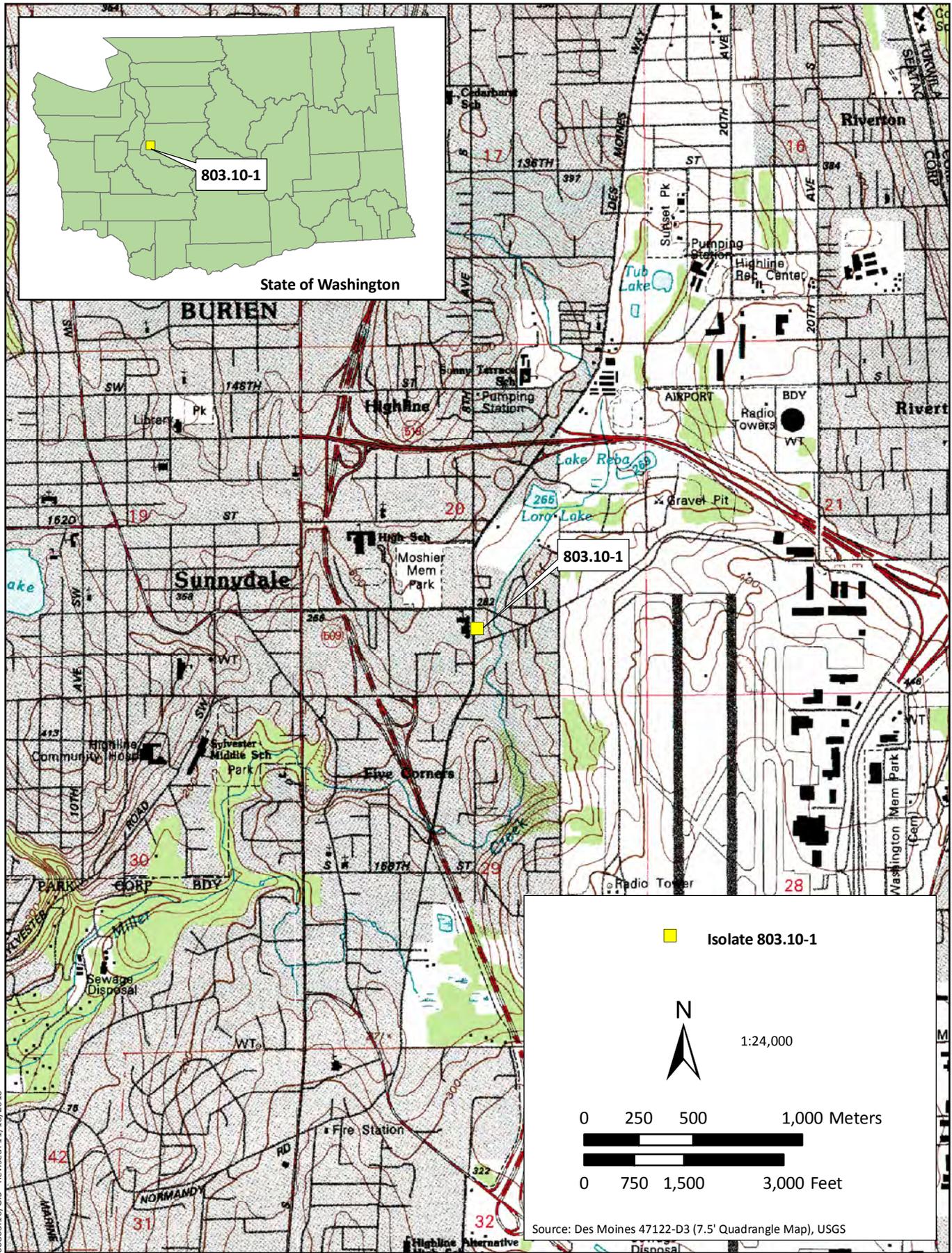
Isolated Flake from Shovel Test Pit No. 8

CONTINUATION/ ADDENDUM SHEET

Label all additional pages by corresponding headings.

(e.g. Isolate Description, Isolate History, Research References, etc.)

NA



00803.10/GIS - Revised: 11/18/2010

Figure 1
Isolate Location
King County Lake to Sound Trail, Segment B

00803-10/GIS - Revised: 11/18/2010

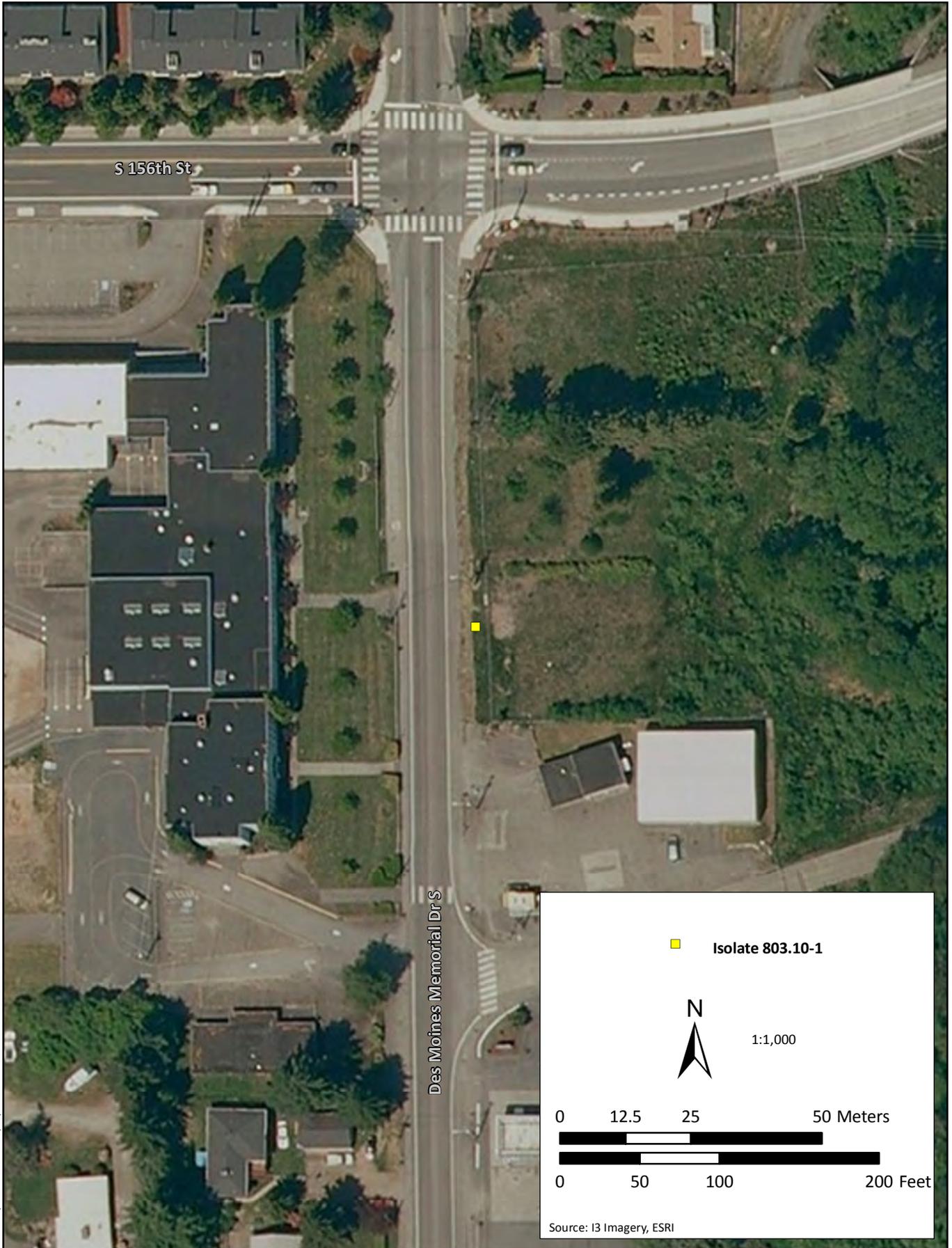


Figure 2
Isolate Location
King County Lake to Sound Trail, Segment B