CULTURAL RESOURCES REPORT COVER SHEET

CLARK COUNTY ARCHAEOLOGICAL PREDETERMINATION REPORT

Telephone: (360) 397-2121 Ext 4227 Property Owner: Clark County Mailing Address: PO Box 9810 Jennifer Taylor Vancouver, Washington 98666 Clark County Department of Environmental Services Applicant: Mailing Address: PO Box 9810 Telephone: same Vancouver, Washington 98666 Relationship to Owner: Same 8713 NE 94th Avenue, Vancouver, Washington Property Address: Tax Lot #10574000, Tax Lot #199845000, and Tax Lot #1998630000 Legal description: Section 4, Township 2 North, Range 2 East, Willamette Meridian. Parcel Acreage: Approx. 33 acres Disturbance Area Acreage: Approx. 33 acres A map showing property location is attached. General Physical Description of Site, including current uses: The project area is located in an urbanized area of the Orchards and Five Corners neighborhoods approximately 2.4 kilometers (km) (1.5 miles [mi]) north of the city of Vancouver in unincorporated Clark County, Washington (Figure 1). The irregularly shaped project is located on the east side of NE 94th Avenue across from NE 88th Street. This is approximately 0.4 km (0.3 mi) north of the intersection of NE 94th Avenue with NE Padden Parkway and 1.4 km (0.9 mi) east of Interstate 205 (I-205) (Figure 2). The project area vicinity has both residential and commercial developments. NE 94th Avenue and a residence (excluded from the project) that fronts the street border the project area on the west. Residential developments border the project area to the east and south. A residence, grassy field with trees, and the closed Leichner Landfill are located to the north. Currently, the project area is an open grassy field with stands of trees (Photos 1 through 3). An east-west-oriented gravel road, providing access to the property from NE 94th Avenue, and an electrical substation are located along the northern boundary. Description of proposed activity: The project area is planned for industrial development. Several buildings ringed with parking lots will be constructed. Predetermination Trigger: Under Matrix, Potential for Impact trigger with Predictive Model Probability Level Low-Moderate to High High potential impact project located within ¼ mile of a recorded site Moderate through high potential impact project located within 500 feet of known archaeological site Discovery during development Other

BACKGROUND RESEARCH

Detail all background research:

Previous Archaeological Studies

Records available online from the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database were reviewed to determine if previously recorded archaeological resources were located within or near the project area. The Archaeological Investigations Northwest, Inc. (AINW), library and the WISAARD database were also reviewed to determine if cultural resource surveys had been conducted within or near the project area. The Clark County Archaeological Predictive Model indicates that the project area falls within the High (80-100%) probability category.

Two archaeological studies overlap the western quarter of the current project area (Bryant and Miles 2005; Fuld et al. 2014). Between the two studies, 14 shovel tests were excavated in the western quarter of the Koski project area.

One of the projects that overlap the Koski project was an archaeological predetermination conducted along NE 94th Avenue from NE Padden Parkway north to NE 199th Street (Bryant and Miles 2005). Fieldwork included a pedestrian survey and excavation of shovel tests, three of which are within the current project area (Figure 2). No artifacts were observed in the shovel tests and no further work was recommended (Bryant and Miles 2005).

The other project that overlaps the Koski project was a cultural resource survey conducted for Clark County for a road expansion project along NE 94th Avenue from NE Padden Parkway north to NE 99th Street (Fuld et al. 2014). Fieldwork consisted of a field reconnaissance, pedestrian survey, and excavation of shovel tests. In total, 11 shovel tests were excavated within the area of the current project area during this survey (Figure 2). No artifacts or evidence of an archaeological site was found and no further work was recommended (Fuld et al. 2014).

An archaeological predetermination was conducted for a large parcel in the open grassy fields that border the west side of NE 94th Avenue, approximately 25 meters (m) (82 feet [ft]) west of the current project area (Laybolt 2006). Fieldwork consisted of a pedestrian survey and excavation of 11 shovel tests. No pre-contact artifacts were identified; however, undiagnostic historic-period/modern artifacts (five pieces of glass and one ceramic fragment) were observed in three shovel tests. No further work was recommended (Laybolt 2006).

An archaeological predetermination was conducted for a radio telecommunications facility approximately 0.3 km (0.2 mi) north of the project area within the existing Waste Connections trash collection facility. A pedestrian survey was conducted and one shovel test was excavated. No artifacts were observed and no further work was recommended (Hudson 2007).

Two archaeological predetermination studies were conducted on adjacent parcels immediately south of the project area (Holschuh 2006a, 2006b). Both studies consisted of pedestrian survey and shovel testing. No artifacts were found and no further work was recommended (Holschuh 2006a, 2006b).

Archaeological sites in the vicinity of the Koski project area are clustered between NE 94th Avenue and the I-205/NE Padden Parkway interchange. Sites are either located near Curtin Creek, 0.8 km (0.5 mi) west of the western end of the project area, or are associated with marshy areas that drain into Curtin Creek. Several of the sites are large and reflect exploitation of resources found in the interior of Clark County.

BACKGROUND RESEARCH, continued

The closest site to the project area is 45CL170, the Lusk site, located approximately 0.4 km (0.2 mi) southwest of the current project area. The site was discovered by the landowner in 1957 and formally recorded in 1979 (Dalan 1979). Subsequent archaeological work on the parcel discovered another site, 45CL580, located approximately 1 km (0.6 mi) southwest of the current project area (Aucutt and Roulette 2003). The two sites contain low to moderate density pre-contact deposits that date to the Early Pacific Period (5500 to 3500 years before present). Artifacts included large stone bowls, pestles, projectile points, debitage, cobble choppers and flaked cobbles, utilized flakes, bifaces, cores, a hammerstone, a net sinker, a drill, and a scraper. The Lusk site, 45CL170, was interpreted as a low-density logistical site that may represent a base camp. Site 45CL580 was interpreted to have a similar function to the Lusk site, but was used less intensely. No further work was recommended at the sites (Hamilton et al. 2004).

Other nearby sites include the multicomponent sites, 45CL437 and 45CL506; as well as pre-contact archaeological sites including the Schultz Marsh site (45CL29) and the Covington site (45CL422). Site 45CL506, located 0.4 km (0.2 mi) southwest of the project area, is currently under the Church of Christ parking lot. Artifacts include one cobble chopper, lithic debitage, ceramic fragments, vessel glass fragments, machine-cut (square) nails, brick, and cast iron fragments. The site was interpreted as a light, diffuse scatter of artifacts and no further work was recommended (Roulette and Solimano 1999).

The Hilberg site, 45CL437, is located 0.7 km (0.4 mi) south of the project area. This multicomponent site consists of flaked cobbles, debitage, a core, a pestle, vessel glass fragments, a kettle fragment, nails, wire, burned shell, metal and ceramic fragments. The site was recommended to not be a significant site and no further work was needed (Reese and Mills 1999).

The Schultz Marsh site, 45CL29, located 0.8 km (0.5 mi) southwest of the project area, contains pit features with fire-cracked rock (FCR) interpreted as plant-processing features as well as abundant artifacts including bowl fragments, convex edge flake knives, and a pendant (Chatters 1973; Duncan 1979). The site was interpreted as a seasonal hunting and plant-processing location occupied approximately 2,000 years ago (Wilt and Roulette 2000).

The Covington site, 45CL422, is a significant pre-contact archaeological site, located 1 km (0.6 mi) southwest of the project area. The site was interpreted to represent a palimpsest of the remains of camp sites occupied by various small groups engaged in a wide variety of activities (Wilson and Roulette 1998). Several features were found, including hearths and a roasting oven, as well as numerous artifacts such as flaked stone, cobble tools, a mortar, pestles, and a possible atlatl weight. Radiocarbon dates suggests the site was occupied between 3,500 to 750 years ago (Wilson and Roulette 1998).

One archaeological isolate, 45CL710, and one archaeological site, 45CL513, are located north of the project area. Archaeological isolate, 45CL710, located 0.7 km (0.4 mi) north of the project area, consists of two flakes and five pieces of FCR. The artifacts were found from 40 to 60 centimeters (cm) (16 to 24 inches [in]) below the surface (Carrilho 2006). Archaeological site 45CL513, located 1 km (0.6 mi) north of the project area, consists of nine flakes and one biface fragment (Roulette 2006).

Historic-period development

Historic map and photographic research indicates that the project area has remained largely undeveloped, other than the southwest corner of the project area that formerly contained a cluster of buildings, likely a residence. Portions of the project area were used as gravel pits adjacent to the closed Leichner Landfill that also previously functioned as a gravel pit.

BACKGROUND RESEARCH, continued

The project area is situated at the edge of a large prairie known as Fourth Plain. The 1856 General Land Office (GLO) map for Township 2 North, Range 2 East, Willamette Meridian, shows the Koski project area within unclaimed land, adjacent to cultivated fields owned by Richard Covington (GLO 1856). This map shows an "Indian Village" southwest of the project area (GLO 1856). The 1863 GLO map shows the project area overlapping the donation land claims (DLCs) of William Golback (DLC No. 70) and James McAllister (DLC No. 37) (GLO 1863). No buildings or structures are depicted within the project area.

A north-south-oriented road in a similar configuration as NE 94th Avenue is shown on an 1888 map of Clark County (Habersham 1888). This map also shows the Golback DLC was owned by Geo Nerton. A 1905 U.S. Geological Survey (USGS) map shows NE 94th Avenue in its current alignment with a few houses lining the road (USGS 1905). A 1915 plat map shows the project area subdivided into eight housing plats on either side of an east-west-oriented road (Clarke Title Abstractors Inc. 1915). Although the project area was subdivided into housing plats, historic maps through the twentieth century do not show development of the project area.

The project area is next depicted on a 1940 USGS map that shows an east-west-oriented unimproved road in the same configuration as the existing east-west gravel road within the project area (USGS 1940). The 1954 USGS map shows the road as well as a topographic depression north of the project area, in the location of the closed Leichner Landfill (USGS 1954). The 1961 map shows that outside the project, the vicinity was residentially developed. This map also shows the east-west-oriented road connecting NE 94th Avenue to an area designated as "pit" (the landfill). The existing house that fronts NE 94th Avenue and borders the project area to the west is shown on the map (USGS 1961). An aerial photograph from the Clark County Soil Survey, taken in 1972, shows the project area was an undeveloped field. The east-west-oriented road on the northern project area boundary is shown as well as two areas that are labeled as gravel pits. The adjacent Leichner Landfill is labeled as a gravel pit as well (McGee 1972).

An aerial photograph from 1990 shows a cluster of buildings in the southwest corner of the project area (Google Earth 1990). The landfill appears to be in use at this time. An aerial photograph from 2000 shows the electrical substation in its current location and the neighboring landfill as closed (Google Earth 2000). By 2009, the cluster of buildings in the southwest corner was gone (Google Earth 2009). The project area has remained in its current condition since 2009.

In summary, the Koski project area is mapped as high probability for containing archaeological resources. Archaeological sites in the vicinity consist of large complex sites reflecting use of the Clark County interior and cluster near Curtin Creek and associated marshlands. Numerous surveys in the project area vicinity did not find archaeological resources, including two projects that overlap the western half of the Koski project area. A portion of the Koski project was used as a gravel pit. Based on the results of this research, it is unlikely a significant archaeological site is present within the Koski project area.

SURFACE INSPECTION

<u>Date of inspection</u>: March 2, 2015 <u>Time of Day</u>: Morning

Weather conditions at time of inspection: Overcast and cool

SURFACE INSPECTION, continue	<u>:d</u>		
Describe soil visibility:		over 50% visible	less than 50% visible

<u>Description of proposed project's locational characteristics</u>: The Koski project area is situated in a residential and commercial area east of NE 94th Avenue within unincorporated Clark County, Washington. It is located within the interior prairie known as Fourth Plain, approximately 0.8 km (0.5 mi) east of Curtin Creek. Curtin Creek flows north into Salmon Creek approximately 4.8 km (2.9 mi) north of the project area. The project area is currently an open grassy field; vegetation includes aspen, birch, alder, Douglas-fir, spruce, ferns, grasses and forbs (Photos 1 through 3).

The Koski project area is topographically flat to undulating. An east-west-oriented gravel road provides access from NE 94th Avenue and parallels the northern boundary. A berm, approximately 15 m (50 ft) higher in grade than much of the project area, is located along portions of the north, east, and southern project area limits. The western portion of the Koski project area, closest to NE 94th Avenue, gently slopes east away from the roadway. The central and eastern portions of the Koski project area showed signs of disturbance including monitor wells, push piles of dirt and gravel, and areas that were lower than the surrounding natural grade (Photos 3 through 7). Some areas appeared mechanically dug out for borrowed soil and may reflect past use of the parcel as a gravel pit (Photo 5). Portions of the enclosing berm appeared artificially created, while other parts of the berm appeared to reflect the original topography of the landscape prior to disturbance of the parcel (Photos 3 and 7).

Soils are a mapped as Sifton gravelly loam (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA-NRCS] 1994). Sifton series soils formed in volcanic ash and alluvium and are found on terraces. A typical profile consists of black to very dark brown gravelly loam with approximately 25% pebble-sized gravels to a depth of 40 cm (16 in) below the ground surface overlaying a dark brown to very dark grayish brown very gravelly loamy coarse sand with approximately 50% pebble-sized gravels (USDA-NRCS 1994). Areas immediately adjacent to the project area, within the closed Leichner Landfill, are mapped as "pits," reflecting the former use of the adjacent area as a landfill.

Describe surface investigation procedures: On March 2, 2015, a pedestrian survey was conducted within the Koski project area by AINW archaeologists Kristen A. Fuld, M.A., R.P.A., Brian Heil, M.A., Meghan Johnson, B.A., Anne Parfitt, B.S., and Colin Skinner, B.S. The project area was surveyed by walking east-west-oriented transects spaced 10 to 15 m (33 to 49 ft) apart (Figure 2). All areas of exposed mineral soils were inspected. Ground surface visibility was poor, less than 25%, and was limited to rodent mounds and occasional bare patches. Much of the central and eastern portions of the project area appeared disturbed by monitor wells, push piles of dirt and rock, berms, and areas that appeared mechanically altered (Photos 3 through 7). Soils observed on the surface were dark brown gravelly loam. Soils were somewhat consistent with the description of Sifton gravelly loam; however, numerous road gravels were observed mixed with the soils.

<u>Describe any artifacts found</u>: Two amber glass bottle fragments were observed on the ground surface of the berm enclosing the northern portion of the project area adjacent to the former landfill. Both objects were in disturbed contexts and do not represent archaeological resources. No pre-contact or historic-period artifacts were found during the pedestrian survey.

SUBSURFACE INSPECTION

Describe and quantify amount of subsurface probing and manual surface exposing activities that were carried out, if any: AINW archaeologists excavated 15 shovel tests, ST-1 through ST-15, within the Koski project area (Table 1; Figure 2). Shovel tests were cylindrical (truncated cone) in shape, measuring 50 cm (20 in) in diameter at the top and 30 cm (12 in) in diameter at the base. Shovel tests were placed to ensure even coverage, taking into consideration areas where shovel tests were previously excavated in the western portion of the project (Bryant and Miles 2005; Fuld et al. 2014), and to sample different portions of the landform. Each shovel test was excavated to a minimum depth of 50 cm (20 in) below the ground surface, except for shovel test ST-8 that was terminated 30 cm (12 in) below the surface when asphalt was encountered (Table 1). Soils were screened through nested 6.4- and 3.2-millimeter (½- and ½-in) mesh hardware cloth. All excavated soils were returned to each shovel test upon completion.

Soils in most shovel tests were consistent with the description of Sifton gravelly loam, however many contained large amounts of gravels and some showed signs of disturbances. Soils in shovel tests ST-2, ST-5, ST-6, and ST-10 consisted of dark brown loam with gravel content increasing with depth, from 20% in the upper portions to approximately 50% gravels in the lower portions of the shovel tests. Shovel tests ST-1, ST-3, ST-4, ST-7, ST-9, ST-11, and ST-12 contained upwards of 75% subangular to subrounded pebble- and cobble-sized gravels in the lower strata of the shovel tests. Shovel test ST-8 was terminated 30 cm (12 in) below the surface when asphalt was encountered. A modern nail was observed from 30 to 40 cm (12 to 16 in) below the surface in shovel test ST-3. Soils observed in shovel tests ST-13 through ST-15, excavated on the berm along the eastern and southern project area boundaries, appeared to be within intact Sifton gravelly loam soils, likely reflecting the original landform (Photo 8). No pre-contact or historic-period artifacts were found in the shovel tests during the subsurface inspection.

FINDINGS AND CONCLUSIONS

State findings and conclusions: No pre-contact or historic-period artifacts or evidence of an archaeological site were discovered during the pedestrian or subsurface excavations within the Koski project area. Two amber bottle glass fragments were observed on the ground surface of the berm enclosing the northern project; these objects were found on a berm adjacent to a former landfill and do not represent archaeological resources. Much of the project area has been disturbed by monitor wells, a berm, and areas that appeared mechanically dug out to borrowed soil, likely reflecting past use of the parcel as a gravel pit. Several shovel tests appeared disturbed and contained upwards of 75% gravels. Shovel tests excavated within intact sediments did not encounter artifacts. Prior shovel testing on the western portion of the project in 2005 and 2014 did not encounter artifacts or evidence of an archaeological site (Bryant and Miles 2005; Fuld et al. 2014).

Based on the results of the surface and subsurface investigations, it is AINW's professional opinion that it is unlikely the project area contains significant pre-contact or historic-period archaeological materials. AINW therefore recommends no additional archaeological study for the Koski predetermination project area.

RECOMMENDATION					
Recommendation:					
	An archaeological resource survey is necessary.				
	An archaeological resource survey is not necessary.				
	Monitor during construction.				
CERTIFICAT	ION AND SIGNATURE				
I certify that I	am a:				
	qualified archaeologist, as defined by RCW 27.53.030(9).				
	professional archaeologist, as defined by RCW 27.53.030(8) and WAC 25-48 020(4).				
Signature of A	Archaeologist:	Date: April 3, 2015			
Thister	- A Jull	Of Riese			
Name: Kriste	n A. Fuld, M.A., R.P.A.	Jo Reese, M.A., R.P.A.			
Address: 351	cological Investigations Northwest, Inc. 0 NE 122 nd Avenue, Portland, Oregon 9723 7473 (Vancouver) 61-6620	0			
E-mail: kriste		E-mail: jo@ainw.com			

REFERENCES

Aucutt, Christina M., and Bill R. Roulette

2003 Results of an Archaeological Survey of the Lusk Property, Clark County, Washington. Applied Archaeological Research Report No. 398. Prepared for AHO Construction, Inc., Vancouver, Washington.

Bryant, Peter, and Todd Miles

2005 Archaeological Predetermination Report for the 94th Avenue Road Project. Archaeological Services of Clark County Report No. 05950. Submitted to Clark County Community Development, Vancouver, Washington.

Carrilho, Y.

2006 Isolate form for 45CL710. On file, Department of Archaeology and Historic Preservation, Olympia, Washington.

Chatters, James C.

1973 Interim Report of Archaeological Excavations at the Schultz Marsh Site. On file, Washington Department of Archaeology and Historic Preservation, Olympia.

Clarke Title Abstractors, Inc.

1915 Map of Clarke County, Washington. On file, Archaeological Investigations Northwest, Inc., Portland, Oregon.

Dalan, Rinita A.

1979 Site form for 45-CL-170, the Lusk Site. On file, Department of Archaeology and Historic Preservation, Olympia.

Duncan, Mary Ann

1979 Site form for 45-CL-29, the Schultz Marsh Site. On file, Department of Archaeology and Historic Preservation, Olympia, Washington.

Fuld, Kristen A., Andrea Blaser, Holly Borth, and Jo Reese

2014 Cultural Resource Survey for the NE 94th Avenue (NE Padden Parkway to NE 99th Street)
Improvements Project, Clark County, Washington. Archaeological Investigations Northwest, Inc. Report No. 3299. Prepared for Clark County Department of Environmental Services,
Vancouver, Washington.

General Land Office (GLO)

1856 Plat of Township No. 2 North, Range No. 2 East, Willamette Meridian. Electronic document, http://www.blm.gov/or/landrecords/survey/yPlatView1_2.php? path=PWA&name=t020n020e_001.jpg, accessed March 31, 2015.

1863 Plat of Township No. 2 North, Range No. 2 East, Willamette Meridian. Electronic document, http://www.blm.gov/or/landrecords/survey/yPlatView1_2.php? path=PWA&name=t020n020e 003.jpg, accessed March 31, 2015.

Google Earth

1990 Aerial photo at latitude of 45.411131 and longitude of -122.342982, vicinity of Orchards, Washington. Imagery date July 14, 1990. Image U.S. Geological Survey.

2000 Aerial photo at latitude of 45.411131 and longitude of -122.342982, vicinity of Orchards, Washington. Imagery date July 28, 2000. Image U.S. Geological Survey.

2009 Aerial photo at latitude of 45.411131 and longitude of -122.342982, vicinity of Orchards, Washington. Imagery date June 25, 2009. Image U.S. Geological Survey.

REFERENCES, continued

Habersham, R. A.

1888 *Map of Clarke County, Washington Territory.* On file, Archaeological Investigations Northwest, Inc., Portland, Oregon.

Hamilton, Stephen C., Bill R. Roulette, and Julie J. Wilt

2004 Archaeology of the Lusk Property: Results of Evaluative Testing at Sites 45Cl170 and 45CL580, Clark County, Washington. Applied Archaeological Research Report No. 407, Portland, Oregon. Submitted to AHO Construction, Inc., Vancouver, Washington.

Holschuh, Dana

- 2006a Archaeological Predetermination Report for the Samielle Park Subdivision. Archaeological Services of Clark County Report No. 06076. Prepared for Taseca Homes, Vancouver, Washington.
- 2006b Archaeological Predetermination Report for 9712 NE 86th Street, Vancouver, Washington. Archaeological Services of Clark County Report No. 06069. Prepared for Alan Kumma, Vancouver, Washington.

Hudson, Andrew

2007 Archaeological Predetermination Report for 9411 NE 94th Avenue, Vancouver, Washington. Archaeological Services of Clark County Report No. 07306. Prepared for Josh Gertsen, Vancouver, Washington.

Laybolt, A. Dawn

2006 Archaeological Predetermination Survey for the Cobb Property. Applied Archaeological Research Report No. 583. Prepared for Primelan LLC, Tigard, Oregon.

McGee, Dale A.

1972 Soil Survey of Clark County, Washington. United States Department of Agriculture, Soil Conservation Service and Washington Agricultural Experiment Station. United States Government Printing Office, Washington, D.C.

Reese, Jo, and Bonnie J. Mills

1999 Level 1 Survey of 94th Avenue Apartments Project. Archaeological Investigations Northwest, Inc. Letter Report No. 343. Submitted to The Shepherd Corporation, Tacoma, Washington.

Roulette, Bill R.

2006 Site form for 45CL513. On file, Department of Archaeology and Historic Preservation, Olympia, Washington.

Roulette, Bill R., and Paul S. Solimano

- 1999 Results of a Cultural Resource Survey of a Portion of the Proposed Andresen Road Church of Christ Development Property, Clark County, Washington. Applied Archaeological Research Report No. 52, Portland. Prepared for Hopper and Dennis, Vancouver, Washington.
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) 1994 Sifton Series. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/S/SIFTON.html, accessed March 31, 2015.

REFERENCES, continued

U.S. Geological Survey (USGS)

- 1905 *Portland, Oreg.-Wash.* 15-minute quadrangle. On file, Archaeological Investigations Northwest, Inc., Portland, Oregon.
- 1940 *Portland*, *Oreg.-Wash*. 15-minute topographic map. On file, Archaeological Investigations Northwest, Inc., Portland, Oregon.
- 1954 Orchards, Wash. 7.5-minute topographic map. Map collection, Oregon Historical Society Regional Research Library, Portland, Oregon.
- 1961 *Orchards*, *Wash.* 7.5-minute topographic map. Photorevised 1970 and 1975. Map on file, Archaeological Investigations Northwest, Inc., Portland, Oregon.

Wilson, Douglas C. and Bill R. Roulette

1998 Supplemental Testing and Data Recovery Excavations of a Portion of the Covington Site (45CL422), Clark County, Washington Prepared for Archaeological Services of Clark County, Vancouver, Washington and Pacific Wing Fung Enterprises.

Wilt, Julia J., and Bill R. Roulette

2000 Results of Evaluative Testing at a Portion of Site 45CL29, Clark County, Washington. Applied Archaeological Research Report No. 62, Portland, Oregon. Submitted to Fred Schultz, Vancouver, Washington.

 $\begin{array}{c} \text{TABLE 1} \\ \text{RESULTS OF SHOVEL TESTS} \end{array}$

SHOVEL TEST NO.	DEPTH OF EXCAVATION (cm)	RESULT
ST-1	53	No artifacts
ST-2	52	No artifacts
ST-3	52	No artifacts
ST-4	50	No artifacts
ST-5	52	No artifacts
ST-6	50	No artifacts
ST-7	53	No artifacts
ST-8	30*	No artifacts
ST-9	56	No artifacts
ST-10	60	No artifacts
ST-11	52	No artifacts
ST-12	53	No artifacts
ST-13	50	No artifacts
ST-14	54	No artifacts
ST-15	50	No artifacts

^{*}Shovel test ST-8 was terminated at 30 cm (12 in) below the surface when a sphalt was encountered.

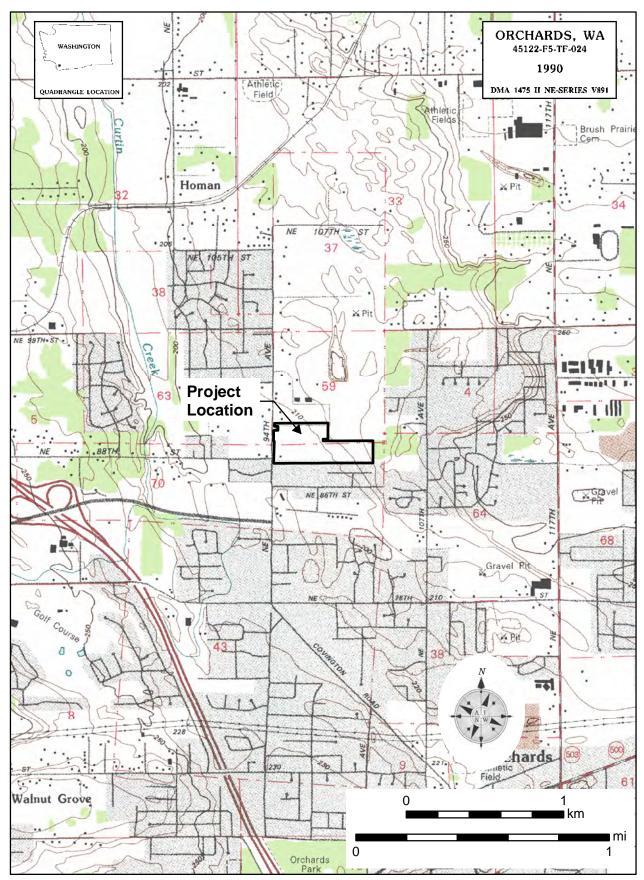


Figure 1. Koski project location.

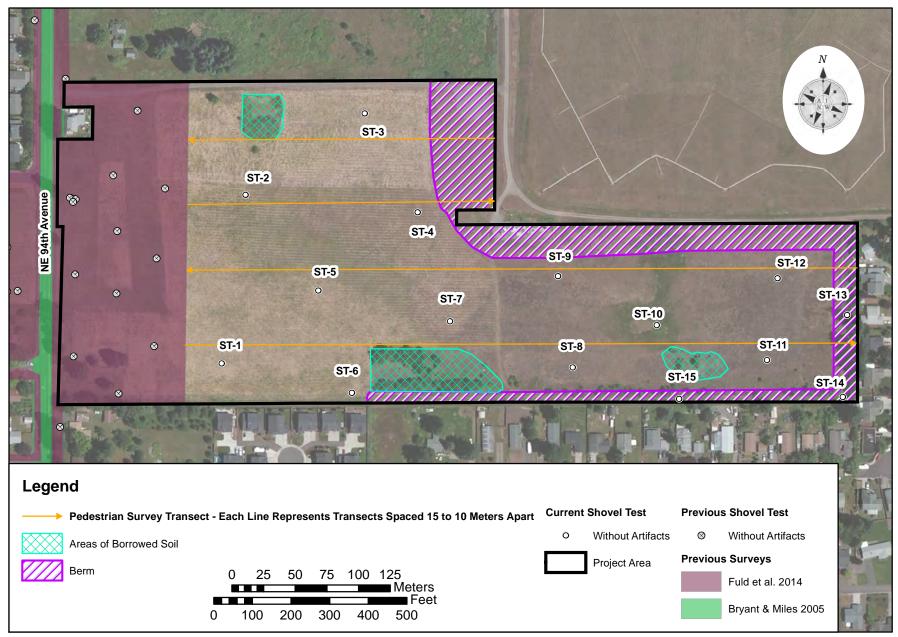


Figure 2. Koski project location, pedestrian survey transects, and shovel tests excavated for this project. The shovel tests without numbers were excavated for previous surveys.



Photo 1. Overview of the western end of the Koski project area. The view is towards the east.



Photo 3. Overview of the project area taken from the berm along the western boundary. The capped landfill is on the right of the photo and the yellow poles mark monitor wells. The view is towards the west.



Photo 2. Overview of the Koski project area. The view is towards the west.



Photo 4. A push pile in the southern portion of the project area. The view is towards the west.



Photo 5. Overview of the northern portion of the project area showing an area of borrowed soil. The view is towards the west.



Photo 7. Shovel test ST-12 in progress. Note the surrounding natural grade is higher. The view is towards the southeast.



Photo 6. Shovel test ST-7 in progress. An electrical substation is located in the upper left of the photo. The view is towards the northeast.



Photo 8. Sifton gravelly loam soils in shovel test ST-15, excavated on the berm along the southern project area boundary. The view is towards the north.