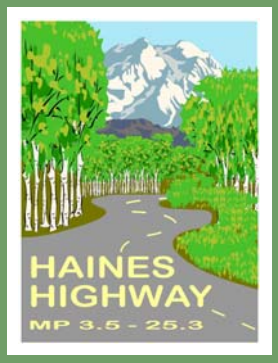

HAINES HIGHWAY

MILEPOST 3.5-25.3

PHASE I

ENVIRONMENTAL SITE ASSESSMENT

MARCH 2006

DOT&PF PROJECT NO. 68606
HAINES, ALASKA

DOWL ENGINEERS

TRANSPORTATION & PUBLIC FACILITIES
STATE OF ALASKA

PHASE I

ENVIRONMENTAL SITE ASSESSMENT

HAINES HIGHWAY – MP 3.5 TO MP 25.3

HAINES, ALASKA

DOT&PF Project No. 68606

Prepared on behalf of:

State of Alaska
Department of Transportation and Public Facilities, Southeast Region
6860 Glacier Highway
P.O. Box 112506
Juneau, Alaska 99811-2506

Prepared by:

DOWL Engineers
4040 B Street
Anchorage, Alaska 99503
(907) 562-2000

W.O. D59119B

March 2006

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FIGURES

TABLES

APPENDICES

ACRONYMS

ADEC ..... Alaska Department of Environmental Conservation
AST ..... Aboveground Storage Tank
ASTM ..... American Society for Testing and Materials
CERCLIS ..... Comprehensive Environmental Response, Compensation and Liability Information System
Client ..... DOT&PF, Southeast Region
DOT&PF ..... State of Alaska, Department of Transportation and Public Facilities
DOWL ..... DOWL Engineers
DRO ..... Diesel Range Organics
EPA ..... Environmental Protection Agency
ERNS ..... Emergency Response Notification System Spill Reports
ESA ..... Environmental Site Assessment
FRS ..... Facility Registry System
FUDS ..... formerly used defense site
HMIRS ..... Hazardous Materials Information Resource System
LUST ..... Leaking Underground Storage Tank
MP ..... Mile Post
NPDES ..... National Pollutant Discharge Elimination System
RCRA ..... Resource Conservation and Recovery Act
RCRIS ..... Resource Conservation and Recovery Information System
Report ..... This ESA Report
SPILLS ..... Alaska Department of Environmental Conservation Spills Database
SWF ..... Solid Waste Facilities
USACE ..... U.S. Army Corps of Engineers
UST ..... Underground Storage Tank

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) of the Haines Highway, Mile Post (MP) 3.5 to MP 25.3 (the Property, Figure 1). The Property is a nearly 22-mile corridor, approximately 300 feet wide and approximately 800 acres. The Property's southern end is located outside the town of Haines and adjacent to the Haines Airport as shown on the Location and Vicinity Map (Figure 1). The complete legal description of the Property is included in Appendix A. In September 2005, DOWL Engineers (DOWL) performed the ESA for the State of Alaska Department of Transportation and Public Facilities (DOT&PF) Southeast Region (the Client). The ESA services included the limited research and data reviews specified herein and a site reconnaissance. The purpose of conducting the ESA was to estimate the potential, as of the date of the assessment, for hazardous substances to be present on the Property at levels likely to warrant mitigation under the current State of Alaska environmental laws and regulations.

This ESA report (the Report), which includes all of the supporting information gathered for purposes of the ESA, was prepared for the benefit of Client. Client may also distribute the Report to third parties, who may then use it at their discretion. However, any reliance upon the Report by a party other than Client shall be solely at the risk of such third party and without legal recourse against DOWL. Any third party that does not agree to the conditions in this paragraph shall not use the Report.

2.0 SCOPE OF ENVIRONMENTAL SITE ASSESSMENT (ESA) SERVICES

An ESA comprises a number of individual elements whose basic nature and extent are determined in accordance with the standard of care for ESAs. The standard of care is commonly defined as the care applied by the ordinary practitioner in the area where the ESA was performed. We believe that we have complied with the applicable standard of care in performing this ESA.

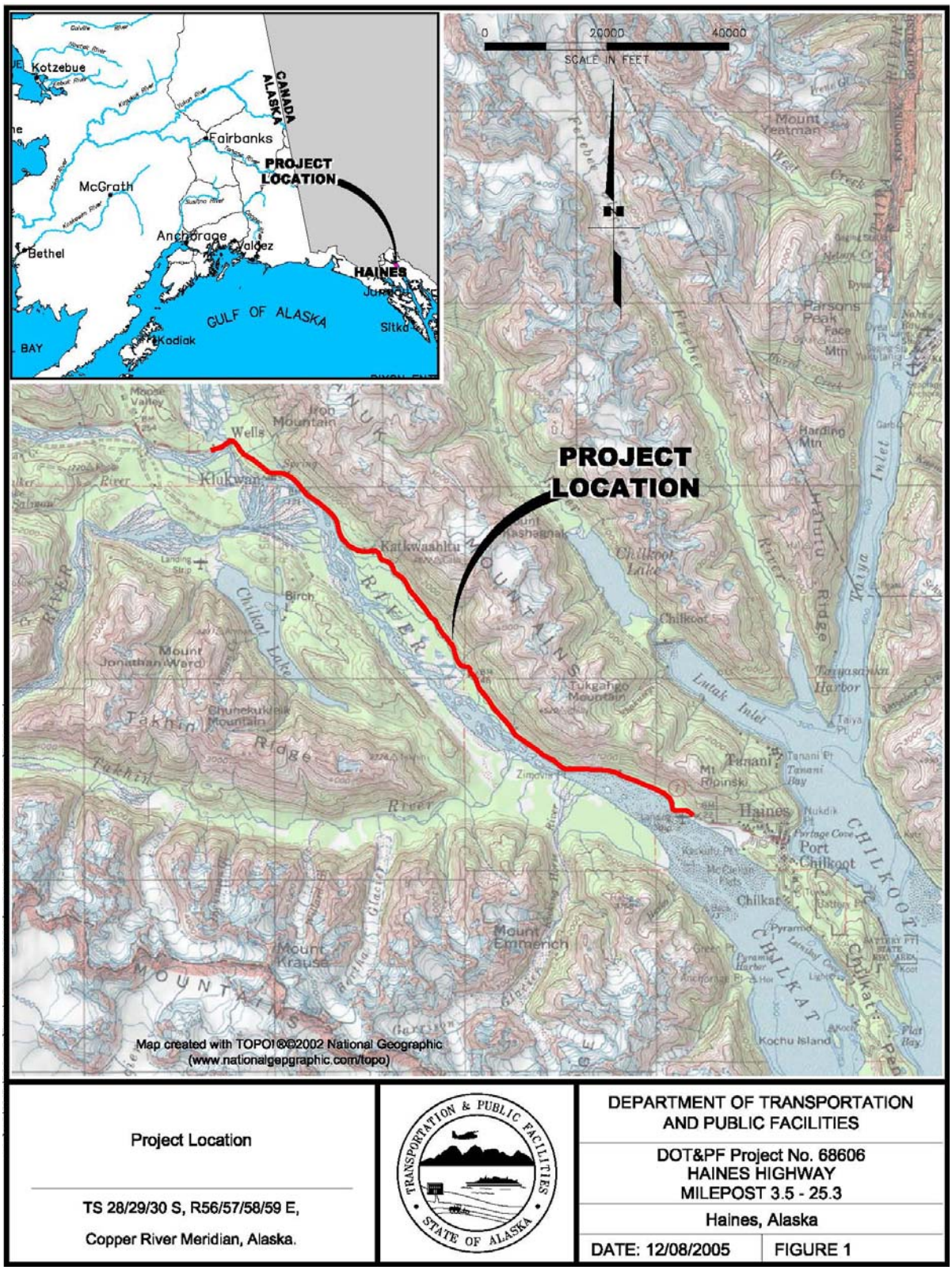

Figure 1: Vicinity and Location Map

Under the scope of work, the activities performed to obtain information about the Property included the following:

- A review of historical aerial photographs spanning the years 1950, 1961, 1978, and 2004.

- A Site Reconnaissance of the Property by DOWL's personnel on September 15, 2005.

- An interview with two individual(s) having personal knowledge of past activities on the Property extending back through 1995.

- A review of data obtained from a search of Federal databases, which includes information from the Environmental Protection Agency (EPA); EPA Facility Registry System (FRS); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List; Emergency Response Notification System (ERNS) Spill Reports List; and the Resource Conservation and Recovery Information System (RCRIS) List for information about nearby sites operating under federal regulations or approved state regulations.

- A review of data obtained from a search of State and Local databases, which includes information from the Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Database, Solid Waste Facilities (SWF), Leaking Underground Storage Tank (LUST) Database, the Underground Storage Tank (UST) Database, the Regulated Aboveground Storage Tank (AST) List and the ADEC Spills Database (SPILLS).

The report meets the government records search requirements for American Society for Testing and Materials (ASTM) Standard Practice for Environmental Sites Assessments, E1527-00.

Although the scope of this work included searching the above governmental databases for indications of nearby properties documented under these systems, it did not include reviews

of the individual files for these entries. No other environmental sampling or research work was included in the ESA activities unless it was specifically referenced in this report.

The findings and considerations presented in Section 8 of this report are based solely upon the information obtained during the ESA. Further, the conclusions include our assessment of the potential for the Property to have been environmentally impacted from past activities on or near the Property. Although the findings and considerations represent our best judgment, they do not represent a *certification* of the environmental status of the Property.

Current conditions and information observed by DOWL during these activities are subject to change. Indicators of the presence of hazardous materials that were latent at the time of this ESA may subsequently become observable. In a similar manner, records or other information sources that DOWL did not review, because the research effort commonly associated with an ESA did not indicate their existence, may contain important information that could not have been considered in the formulation of DOWL's conclusions. Information and representations obtained from individuals interviewed for this report were relied on unless incidents of conflicting data were noted. DOWL accepts no responsibility for inaccuracies or deficiencies in this report resulting from omissions or misrepresentations by the persons interviewed.

3.0 INVESTIGATION OF HISTORICAL BACKGROUND

3.1 Recorded Documents

Ordinarily a summary of the Deed History would be presented in this section; however, it was determined that a Deed History for the Property was not necessary because the Property's use has been documented since the Property's original date of construction and is known by the Client.

3.2 Aerial Photography

Prints of 42 aerial photographs of the site and its vicinity were reviewed on October 21, 2005; aerial photographs of the site and its vicinity were obtained from AeroMap U.S., Inc., Anchorage, Alaska. The 48 prints purchased to complete the photographic review will be

retained in DOWL's archived files. Additionally, an aerial provided by the Client from 2004 was reviewed for current conditions. The photographs were taken in 1950, 1961, and 1978. The photographs were examined for indications of the types of land use and surface activities that were present on the Property and on adjacent parcels during those periods. Summary review comments follow. Additional comments are included in Appendix B.2

The photograph reviews indicated that the Property was already developed in 1950. Private homes and other adjacent properties were undeveloped and appeared to be in their natural state, with the exception of several material sites.

Beginning between the 1950 and 1961 photographs, the town of Haines developed substantially. Between 1950 and 1961, a material site on the mountainside of the highway existed with buildings or trailers on the riverside of the highway, but by 1978, these buildings were completely gone.

The 1961 photograph shows the Chilkat River has moved toward the airport runway and by 1978, the river is adjacent the runway. Since 1978, an earthen berm was constructed to protect the runway.

4.0 AGENCY FILE REVIEWS

The following sources and records were reviewed for information about releases near the Property.

4.1 Federal Records

EPA FRS Query dated October 21, 2005 - The EPA FRS is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The FRS provides access to a single integrated source of comprehensive (air, water, and waste) environmental information about facilities, sites or places. The FRS disclosed that there were 26 sites listed within the Haines zip code. Of these, one is located adjacent to the Property:

1. Southeast Roadbuilders, Inc., Database: Aerometric Information Retrieval System Registry, which is used to track emissions and compliance data from industrial plants. ID: 110007236641. AFS Plant #00015.

Resource Conservation and Recovery Act (RCRA) Information Query dated October 21, 2005 - A listing under the RCRIS category alone indicates that the addressee has reported that they generate, handle, or transport regulated substances but does not necessarily mean that these substances have been released. These sites are listed under the EPA Region 10 Report of RCRA Handlers. One site is listed and is described above for an EPA air permit.

CERCLIS dated October 21, 2005 - A listing under this category indicates it is a site where releases were reported and subsequent investigations may have been performed. There is one site shown under the CERCLIS category potentially adjacent to the Property.

1. The Haines-to-Fairbanks Pipeline - within the Property; CERCLIS ID# AKN001002523.

The pipeline is listed on the CERCLIS database, but is not a Superfund site. No Record of Decision was available through the database. The pipeline was constructed in 1953 and 1954 and put into service in 1955 to transport fuel from Haines to Fairbanks and operated until 1971 (EPA). The eight-inch pipeline extended 626 miles (300 miles in Canada and 326 miles in Alaska) from the Haines Terminal to the Fairbanks Terminal at Fort Wainwright. The pipeline route followed the Haines Highway to Haines Junction, Yukon Territory (Canada), then along the Alaska Highway to Delta Junction and along the Richardson Highway to Fort Wainwright near Fairbanks. In the Haines area, the 8-inch pipe has been out of service for many years. In some places, power and telephone wiring has been placed in the old pipeline. The pipeline right-of-way was generally 25 feet wide on each side of centerline. The pipeline was surface laid in some areas and buried in others. Dioxin was at one time suspected of being used to de-foliate areas near the pipeline, but no herbicide-related dioxin contamination was found along the pipeline (Alaska Department of Environmental Conservation, 2004).

EPA ERNS Spill Reports List dated October 25, 2005 - The ERNS List records and stores information on reported releases of oil and hazardous substances. The records indicate that the Property and adjacent properties have no ERNS files.

4.2 Alaska Department of Environmental Conservation (ADEC) Records

ADEC Contaminated Sites Database dated October 21, 2005 – The contaminated sites database is the states' equivalent to CERCLIS. These sites may or may not have been listed on the federal CERCLIS list. There is one site listed within the one-mile search radius of the Property.

- LAB Flying Service Hangar- this site is located approximately ½ mile south from the Property.

  This site has 'low' priority type with the facility status listed as 'active'. The problem statement is reported as "DRO contamination present due to leaks from bulk tanks and piping." Contamination is under hanger and steel fuel lines.

LUST File dated October 21, 2005 - LUST records contain an inventory of reported LUST incidents. The following entry is reported to be either on or adjacent to the Property:

- Northern Timber Corporation - Haines - this site is located within the Property.

  This site has 'medium' priority type and a status of 'closed'. The problem statement is reported as "gravel pit operated by Northern Timber Corporation is location of stockpiled contaminated soil from three Haines service stations." Confirmation sample results met Level A cleanup levels. A site closure letter was sent June 19, 2002.

ADEC Registered UST List dated October 21, 2005 - Registered USTs are regulated under Subtitle 1 of the RCRA and must be registered with the ADEC, which is responsible for administering the UST program. The following entry is reported to be either on or adjacent to the Property:

- Northern Timber Corporation - Haines - this site is located within the Property.

The report states zero tanks for this facility and a status of closed. The report links the UST report with the LUST report.

SWF dated October 21, 2005 - This listing typically contains an inventory of solid waste disposal facilities or landfills in the state. These may be active or inactive facilities or open dumps that failed to meet the RCRA Subtitle D Section 4004 criteria for SWF or disposal sites. The records show that none of these facilities are within one-half mile of the Property.

SPILLS dated October 21, 2005 - The records show that there has been three reported incidents of spills on the Property.

Table 1: Spills in Study Area

Facility Name	Spill Location	Gallons Released	Date	Type	Cause	Action
Haines City	Saw Mill Ck, road leading to Klukwan	3	9/9/95	Hydraulic oil	NA	No Further Action Decision
Chilkat	17 mile Haines Highway[1]	100	8/12/95	Diesel	Collision	No Further Action Decision
Near Airport Access Road	Haines	15	3/21/00	Hydraulic oil	Line failure	No Further Action Decision

[1] In the late 1990s, a worker reported to ADF&G that contaminated soil was encountered during excavation work for utility relocation. No subsequent testing was performed and no verification of the contamination occurred.

4.3 Environmental Permits

National Pollutant Discharge Elimination System (NPDES): At the time of the report there was not a NPDES permit assigned to the Property.

5.0 PHYSICAL SETTING AND CHARACTERISTICS

The Property is a nearly 22-mile corridor, approximately 300 feet wide and approximately 800 acres. The Property's southern end is located outside the town of Haines and adjacent to the Haines Airport, approximately 75 air miles from Juneau. Haines is located at the isthmus of a peninsula bounded by Chilkoot Inlet to the east and the Chilkat River to the west. The Boundary Mountains lie to the north and northwest, so-called because of the Alaska-Canada border. Haines lies at approximately 59.2° North Latitude and 135.4° West Longitude. (Sec. 34, T030S, R059E, Copper River Meridian.) Haines is located in the Haines Recording District.

5.1 Surface Conditions

The area encompasses 13.5 square miles of land and 8.0 square miles of water. Haines has a maritime climate characterized by cool summers and mild winters. Summer temperatures range from 46°F to 66°F; winters range from 10°F to 36°F. Temperature extremes have been recorded from -16°F to 90°F. Total precipitation averages 52 inches a year, with 133 inches of snowfall (http://www.commerce.state.ak.us/dca/commdb/CIS.cfm).

To the north of Haines are the Takshanuk Mountains, which slope down on the west to the Chilkat River. The Property occupies a relatively thin strip of land between the river and the sometimes-vertical cliffs of these mountains. The river is composed of numerous braids, sloughs and the land on the west side of the highway is generally flat and low-lying.

5.2 Subsurface Conditions

The property lies within the physiography of the coast mountain province (coastal foothills section) of southeast Alaska. Mountain slopes are relatively smooth as a result of glacial advances (Wahrhaftig, 1965). The bedrock geology of the area is dominated by three major northwest-trending units: (1) the Alexander terrain, consisting largely of limestone; (2) the Gravina -Nutzotin belt, consisting of marine-laid volcanic and sedimentary rocks; and (3) the Coast Range batholith, which is granitic. Surficial deposits in the area are either glacial, glacio-fluvial, fluvial, or moraine (McMahan, Holmes, 1989).

6.0 SITE RECONNAISSANCE

Ms. Emily Creely and Ms. Rachel Cruz of DOWL conducted a reconnaissance of the Property on September 15, 2005. The Property's location is described in Section 1 and is shown on the Location and Vicinity Map (Figure 1). There were no weather conditions that limited observation of the site's surfaces or vegetation during the reconnaissance. Site observations were recorded and photographs were taken at key points during the reconnaissance. A transcription of the site comments and a selection of the photographs are included in Appendices B.2 and B.4. Summary observations include:

6.1 Current Use of the Property

The Property is being used by the Client as a highway.

Major areas of the Property and summary observations of their usage are as follows. See Figures 2-4 for reference to site areas.

6.2 Observed Use of Adjoining Properties

Riverside of the Property: Unimproved/Undeveloped, with the exception of developed pullouts, interpretive signs and porta-potties. Additionally, two boat launches are located adjacent the road and the river.

Mountainside of the Property: Unimproved/Undeveloped, with the exception of approximately 20-25 private property parcels with homes in various stages of development. Additionally, one commercial property is located between the highway and the mountains – refer to Site 2 and 3 (see Figure 2).

6.3 General Observations

Topography and Drainage: The natural topography of the Property is a small grade from the northwestern end of the property to the southeastern part of the property as the Chilkat Valley flows from the northwest to the southeast where it enters Lynn Canal. Additionally, runoff drains from the mountains to the river, in a generally east to west direction.

Off-site drainage appeared to be directed onto the Property from the mountainside of the highway, but for the most part, a ditch prevented the runoff from continuing onto the roadbed.

Sewer, Water, Storm Drainage and Electric Facilities: Any domestic water within the Property is obtained from private wells. Sanitary sewer service is provided by septic systems. Utility boxes and areas of buried electric wires carry electric service to various areas of the Property. The quality and performance of the utility systems serving the Property were not evaluated under this assessment.

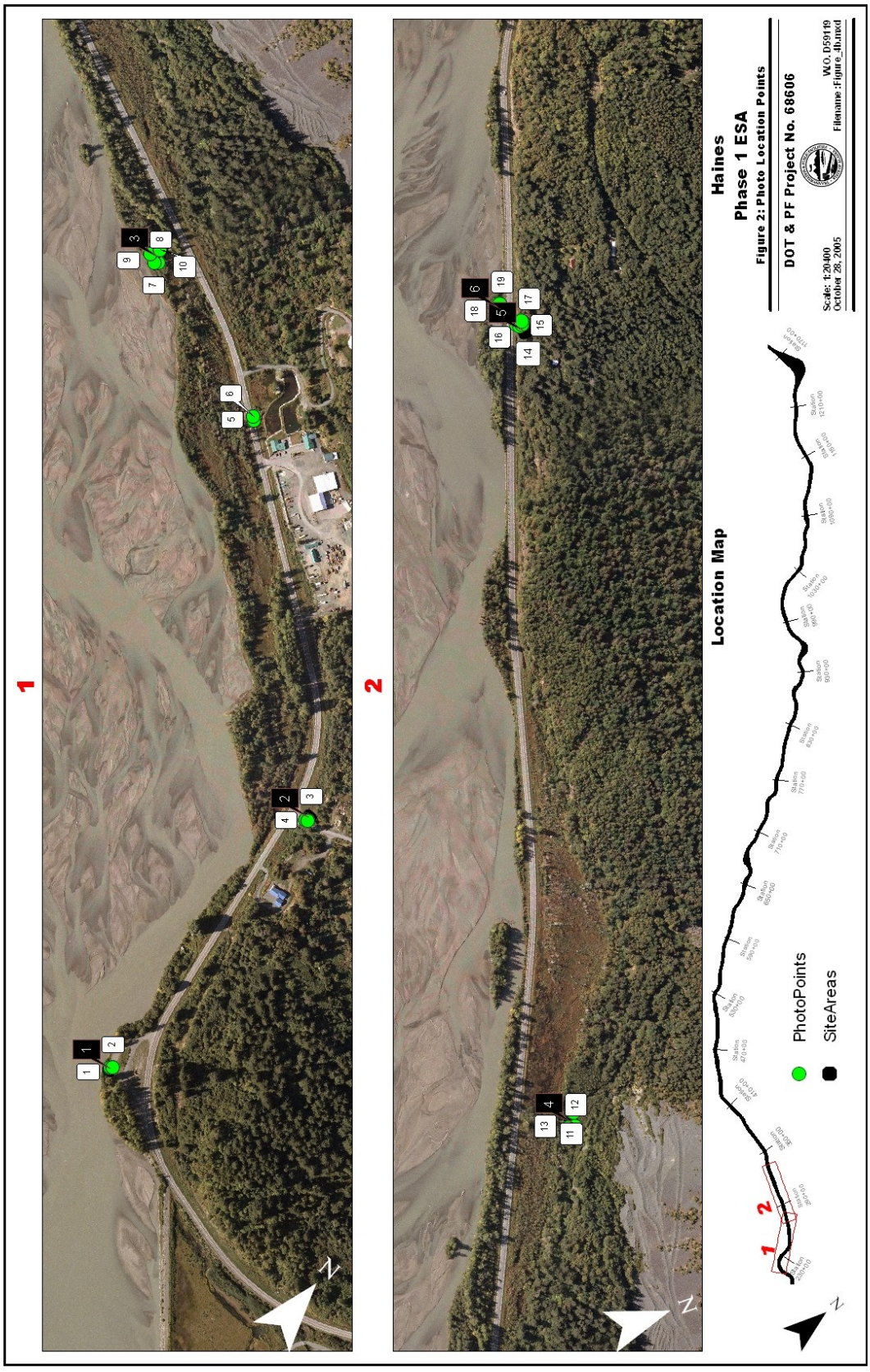

Figure 2: Photograph Point Location Map

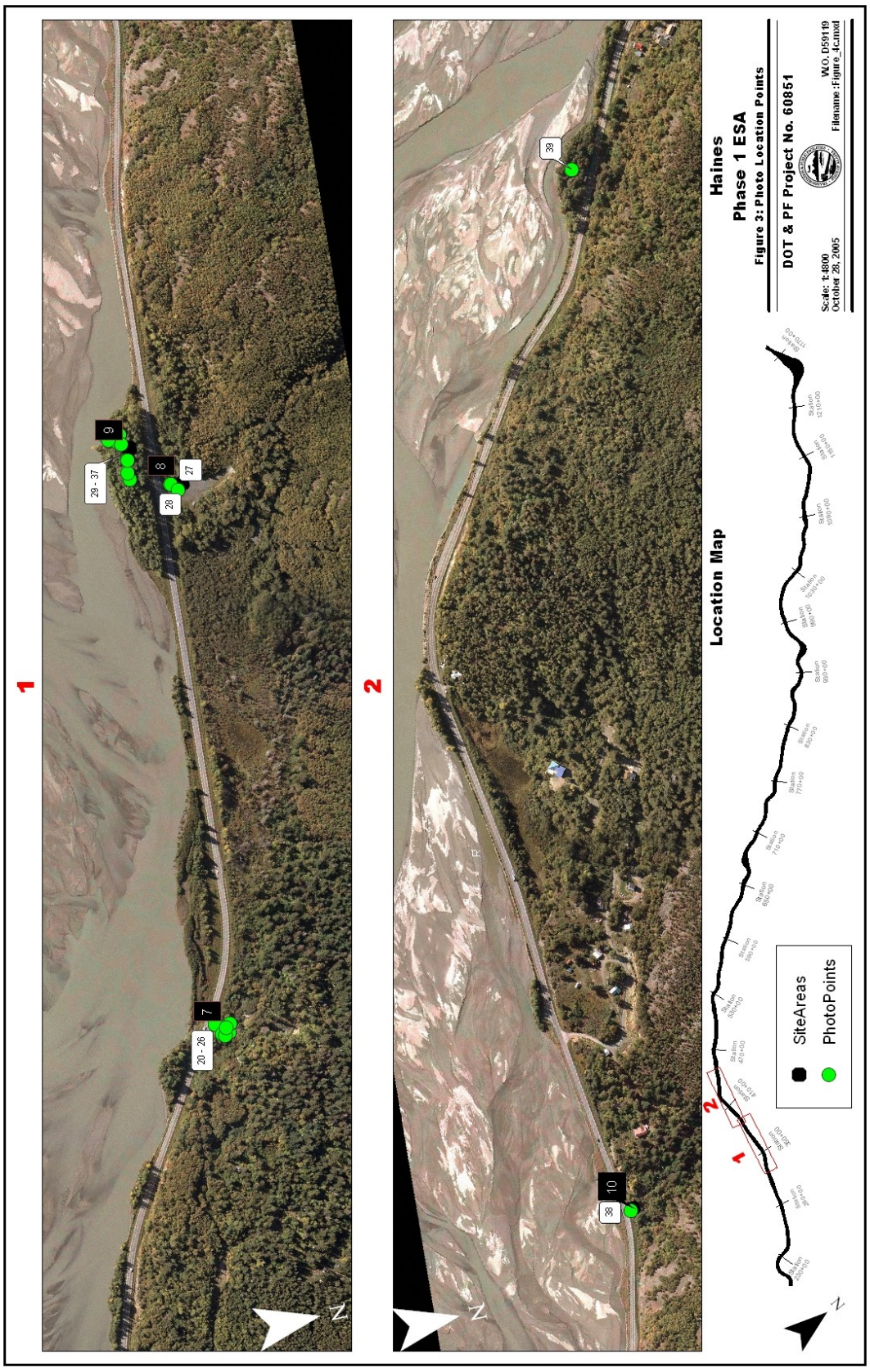

Figure 3: Photograph Point Location Map

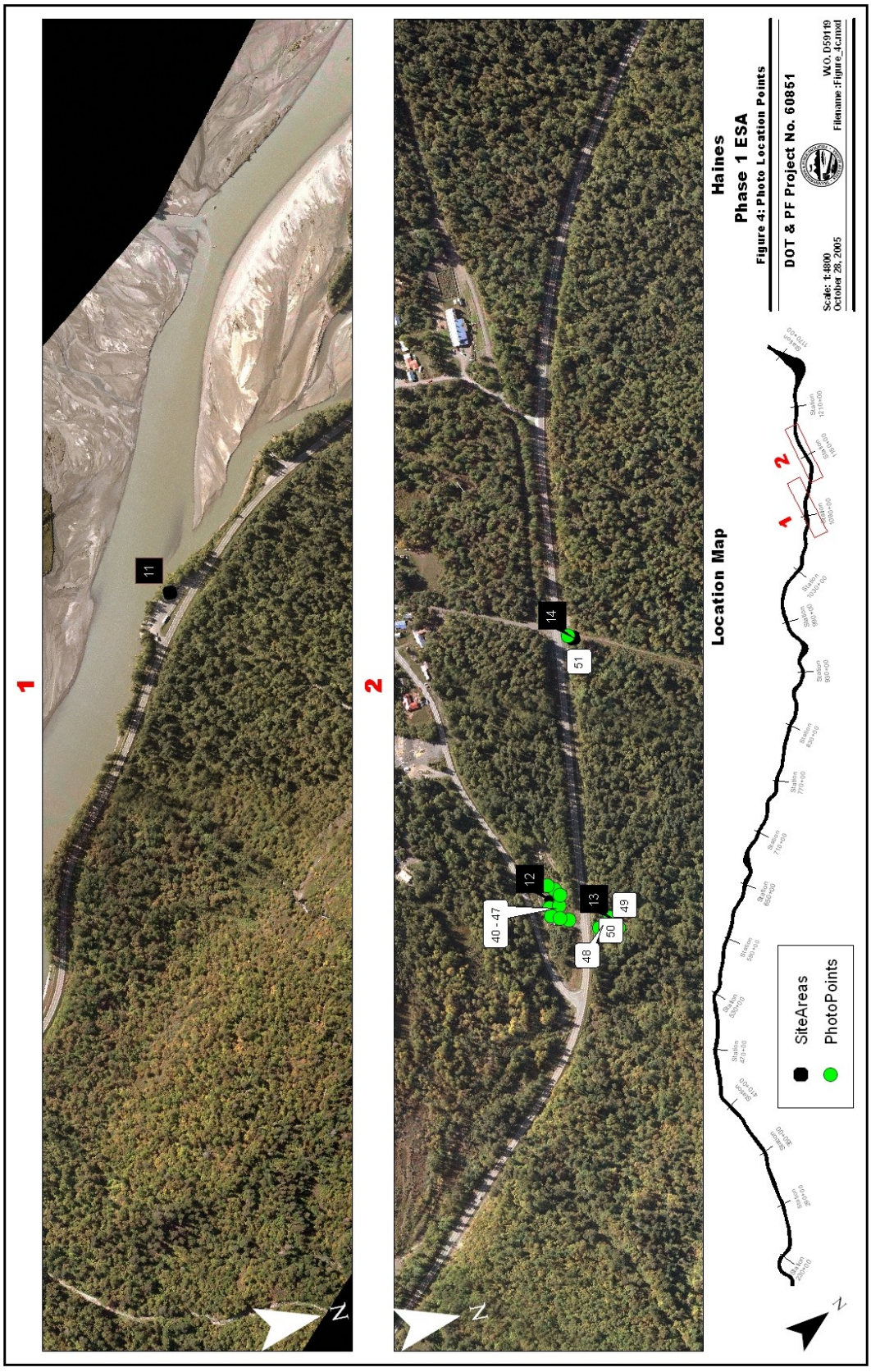

Figure 4: Photograph Point Location Map

Special Indicator Features: Except for 14 areas (described in Section 8.1), the overall appearance of the exterior surfaces of the Property during the reconnaissance was clean and orderly. No discolored or otherwise distressed vegetation was observed. No standing water, unnatural appearing surfaces, unusual odors or indications of pits, ponds or lagoons were observed.

Interior Spaces: No interior spaces were observed for this report.

7.0 PERSONAL INTERVIEWS

The following individuals were interviewed for their personal knowledge of the recent history of the Property. Notes from these interviews are included in Appendix B.

1. Mr. Roger Ingledue was interviewed by telephone on September 15, 2005.

   Mr. Ingledue is the Foreman of Maintenance and Operations for the Client and has been involved with the daily maintenance and operation activities conducted on this site for 10 years.

2. Ms. Anne Marie Palmieri was interviewed by email on October 24, 2005, with an additional follow up email on October 26, 2005, and follow-up telephone interview on March 1, 2006.

   Ms. Palmieri is the ADEC staff responsible for Haines area contaminated sites and LUST sites and provided information regarding sites described in Section 4.

3. Mr. Randy Erickson was interviewed by telephone on March 1, 2006.

   Mr. Erickson is a biologist with Alaska Department of Fish and Game and provided anecdotal information regarding a spill in the Property's vicinity.

4. Ms. Melissa Markell was interviewed by telephone on March 1 and March 3, 2006. She also provided information through e-mail on March 6, 2006.

Ms. Markell is the lead technician for the Haines-to-Fairbanks pipeline investigation and provided information regarding the environmental sampling of the pipeline corridor.

5. Ms. Keri Nutter was interviewed regarding contamination at MP 15.5. The United States Army Corps of Engineers (USACE) explained there was a pipeline leak here. If roadway construction occurs prior to the Formerly Used Defense Site (FUDS) Program cleanup, the USACE would assume primary responsibility in dealing with the contaminated soils.

8.0 FINDINGS AND CONSIDERATIONS

8.1 On-site Issues

We have performed a Phase I ESA in conformance with the scope of work outlined in Section 2 for the Property. This assessment has revealed no evidence of potential environmental conditions in connection with the Property except as described below.

The Property is a highway and with the exception of the portion that bisects the Alaska Chilkat Bald Eagle Preserve, numerous shoulders and areas adjacent to the highway contained evidence of potentially illegal squatting, several garbage dumps, shooting, and mass loitering. The following sites are located on Figures 2-4 and pictures of these locations are in Appendix B.

Site 1: A cabin has been constructed just off the shoulder in a parking area.

Site 2: Six 55-gallon drums were found between the road and the developed area of the Southeast Roadbuilders property. Five barrels appeared to be old, empty, and were rusted thoroughly without any apparent labeling. One barrel had a fading label and was empty.

Site 3: A cabin (a potential squatters cabin) has been constructed in a heavily wooded area between the road and the river. Associated debris includes appliances, car parts, and a footpath made of wood.

Site 4: An illegal dumping area that contained batteries, firepit, filled soap buckets, and other debris.

Site 5: Between the road and the mountainside, a small shed has been built that is a hydroelectric generator. Associated material includes metal piping, a drum, and other mechanical equipment.

Site 6: On the shoulder, between the highway and the river is a recently used firepit and old trailer.

Site 7: A large area, which contains a dilapidated old home site, was found between the road and the mountains. Associated debris included one drum, a partially collapsed house, car, and shed with one old drum. A smaller building was also observed up the hill.

Site 8: An illegal shooting range was observed on the mountainside of the highway.

Site 9: Between the highway and the river is a large parking area with signs of illegal loitering, which included a burn pile approximately 15x10x5 feet large, a used trailer and associated machinery, and a pit that appears to be an old outhouse site.

Site 10: An abandoned car was observed in the heavily wooded area between the highway and the mountains.

Site 11: Two porta-potties were observed on the parking area between the river and the highway.

Site 12: At the Klukwan turnoff, an area was observed that contained multiple vehicles, oil buckets, and associated debris.

Site 13: A large area that contains a dilapidated house, shed, truck, and trailer.

Site 14: An old abandoned structure was observed between the highway and the mountains.

In addition, this assessment has revealed no evidence of recognized (known contamination) environmental conditions in connection with the property, except as described below.

Several locations along the highway where the Haines-to-Fairbanks pipeline ran are currently being investigated for the presence of hydrocarbons. The investigation is being operated under the FUDS Program and ADEC will provide oversight. The USACE administers the investigation and performed hydrocarbon sampling in November 2005, which will resume in May or June of 2006 (see Table 2). The November sampling included two locations within the vicinity of the study area, referred to as Release 19.5 and Valve 25.5. During the investigation, hydrocarbon contamination was found at Valve 25.5, near the Wells Bridge (see Figure 5). The second site is located around MP 17.5 and hydrocarbon product was detected, but not at ADEC action levels.

Table 2: Locations Scheduled for Spring Sampling

Name	Location	Associated Historic Spill	Sampled in November 2005
Release 6.5	MP 4.5	Yes	No
Release 17.7	MP 15.5	Yes	No
Release 19.5	MP 17.5	Yes	Yes
Valve 25.5	Wells Bridge	No	Yes

In spring 2006, the USACE will sample two additional locations, Release 6.5 and Release 17.7, that have associated historic spills (see Figure 6). The USACE will also revisit Release 19.5 to determine if additional product is present, as this site also has a historic spill associated with it.

Of the new sites, Release 6.5 is just south of Southeast Roadbuilders, adjacent to the creek on the side of the shoulder. Release 17.7 is an area several hundred feet long where a spill occurred in the pipeline several decades ago. Part of the USACE's work at this site will be to determine if the site should be referred to the State's contaminated sites list.

8.2 Off-site Issues

As reported in Section 4, suspected or confirmed soil and groundwater contamination has been documented for underground fuel storage tank facilities located on off-site properties within a one-half mile radius the Property. Additionally, locations of other incidents involving the release of hazardous substance have been documented within a one (1) mile radius from the Property as noted in that Section.

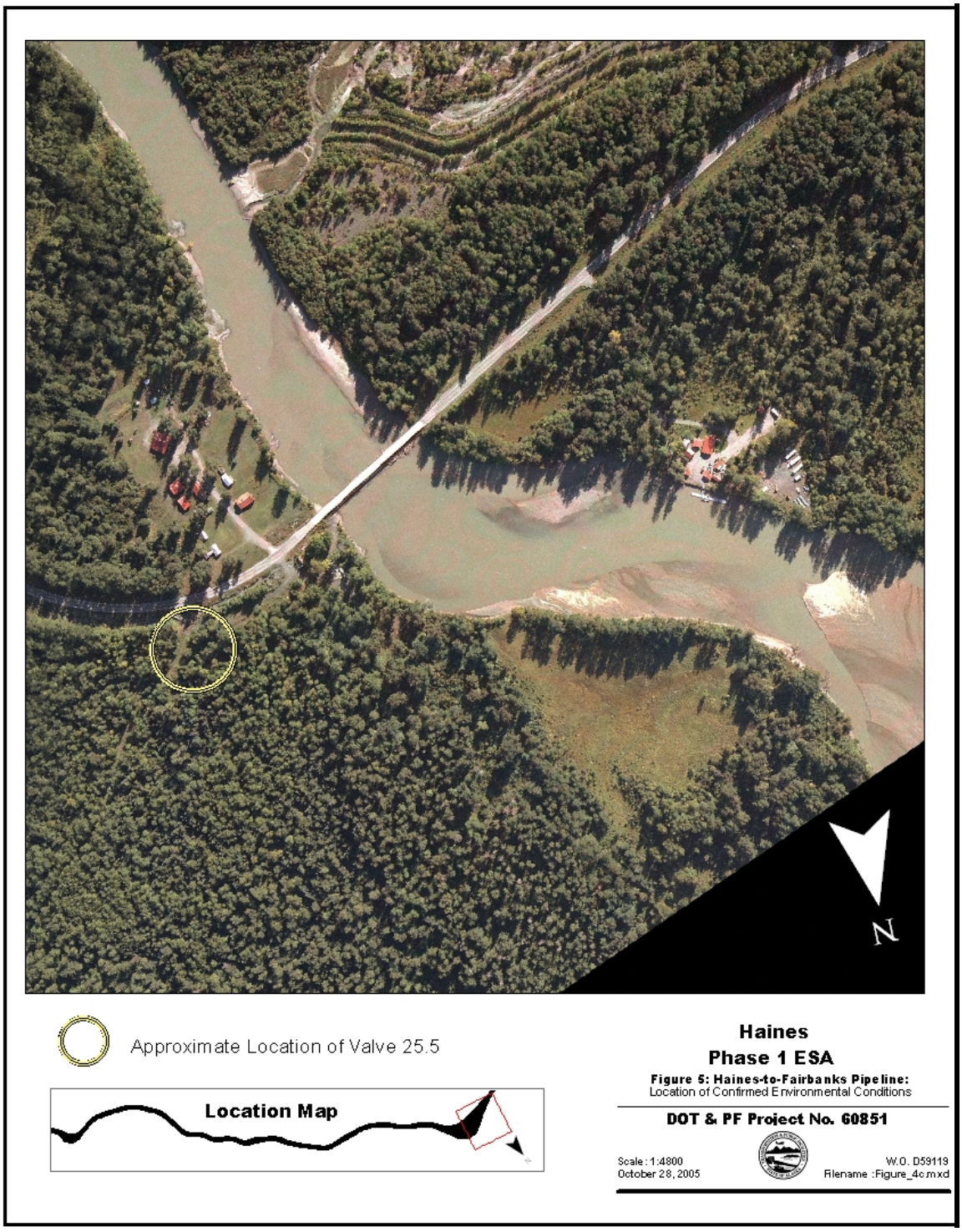

Figure 5: Haines-to-Fairbanks Pipeline: Location of Confirmed Environmental Conditions

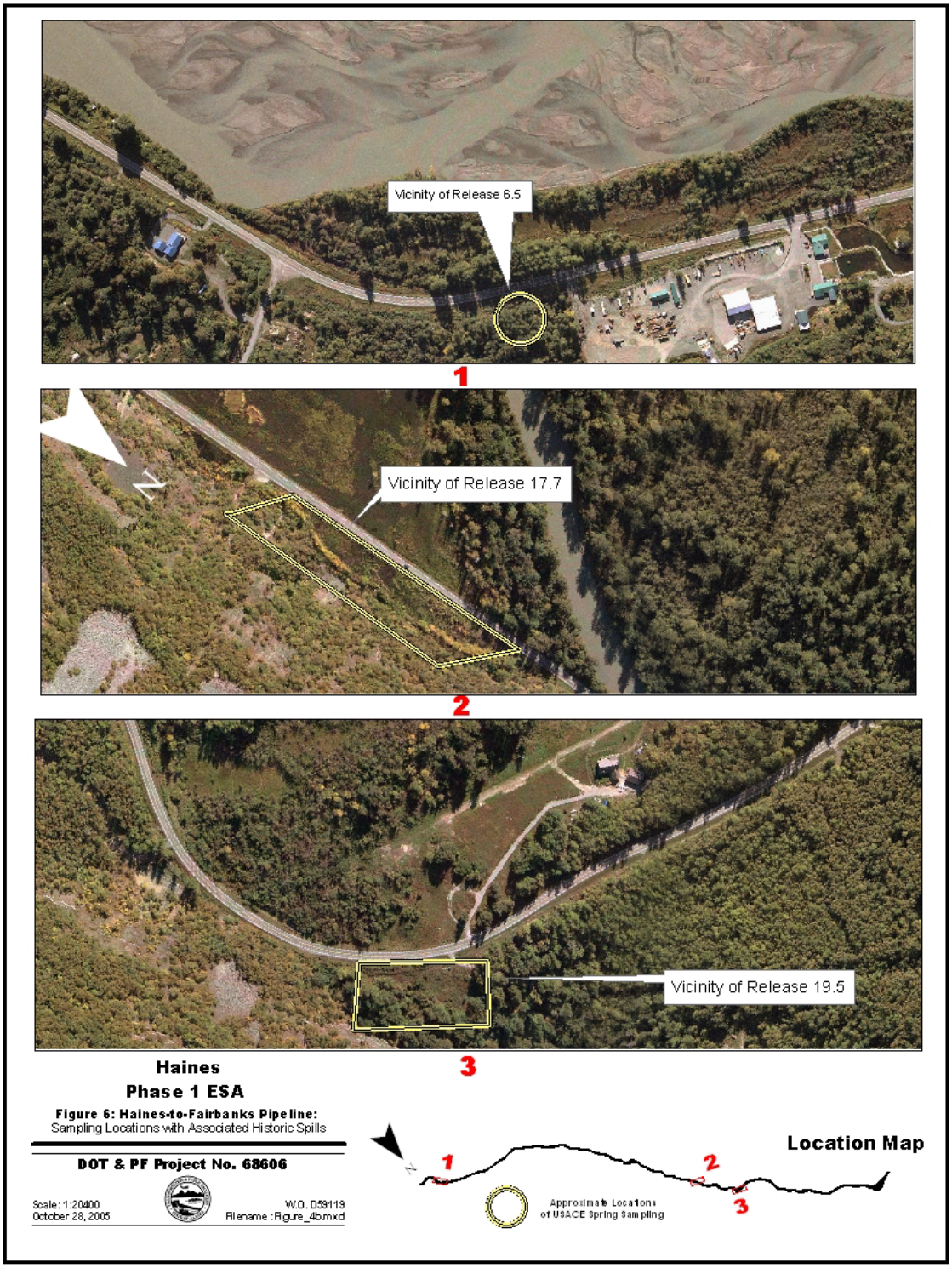

Figure 6: Haines-to-Fairbanks Pipeline: Sampling Locations with Associated Historic Spills

It is always possible that contamination from one or more of these off-site locations could possibly have migrated to the Property. These possibilities are probably minimal in this case, however, since most of these locations have either undergone investigations resulting in a no further action status or are located at sufficient distances or in such directions from the Property that migration to the Property is unlikely. If desired, a more extensive assessment could be performed to provide more definitive information about the presence or absence of contaminant migration to the Property. This additional work could include detailed reviews of individual files for pertinent off-site releases and performance of a subsurface investigation on the Property with collection and chemical analysis of soil and groundwater samples.

9.0 CONCLUSIONS AND RECOMMENDATIONS

Although the Property contains 14 areas of debris, junked cars, illegal camping areas and other various structures, none of the these areas warrant further investigation. However, based on the information obtained during this Phase I ESA, it is DOWL's judgment that past activities on and adjacent to the Property have posed no significant potential for environmental impairment of the Property, with the exception of contaminated soil detected Vault Valve 25.5 described in Section 8.0 and shown in Figure 5. It is recommended that the client continue to monitor the status of the Haines-to-Fairbanks pipeline investigation and coordinate with ADEC, regarding the results of upcoming sampling.

10.0 REFERENCES

Alaska Department of Commerce, Community, and Economic Development. 2005. Alaska Community Database, Community Information Summaries – Haines. Found at http://www.commerce.state.ak.us/dca/commdb/CIS.cfm

Alaska Department of Environmental Conservation. 2004. Dioxins and the Haines-Fairbanks Pipeline Division of Spill Prevention and Response. Fount at http://www.dec.state.ak.us/spar/csp/docs/hfp/hfpdioxin_factsh_1_04.pdf

Environmental Protection Agency. 2005. Site Description of Superfund Site 100146. Found at (http://oaspub.epa.gov/enviro/cerclis_web.description_report?pgm_sys_id=AK6210022426

McMahan, David J., Holmes, Charles E. (1989) A Cultural Resources Investigation at Haines Airport, Haines Alaska (Project No. 69523). Office of History and Archaeology Report Number 16.

Wahrhaftig, Clyde (1965) Physiographic Divisions of Alaska. Geological Survey Professional Paper No. 482.

APPENDIX A
PROPERTY DESCRIPTION

Property Description

The Property spans nearly 22 miles and is therefore not able to be referenced to a single set of coordinates. The Property is located within the U.S. Geological Survey Skagway Quads A-2, B-2, B-3 (Township 30S, Range 59E, Section 19; Township 30S, Range 58E, Sections 6, 7, 8, 14, 15, 16, 17, 23, 24; Township 29S, Range 58E, Section 31; Township 29S, Range 57E, Section 5, 6, 8, 9,14, 15, 16, 23, 26, 25, 36; Township 28S, Range 56E, Section 29, 32, 33, 34 - Copper River Meridian) and is within the Haines Recording District.

APPENDIX B

SUPPORTING DATA AND INFORMATION

APPENDIX B.1
AERIAL PHOTOGRAPH SUMMARY

AERIAL PHOTOGRAPH SUMMARY

Project: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

Photo Source: AeroMap U.S., Inc., Anchorage, Alaska
Reviewed on October 21, 2005

Period: 1950-1978

Date	Scale (Approx.)	Photo Nos.	Remarks
Sep 30, 1950	1:20,000	#139	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#141	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#143	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#145	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#147	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#149	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#151	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#153	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#157	(Photo purchased/DOWL Archives.)
Sep 30, 1950	1:20,000	#159	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 21-14	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 21-16	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 22-12	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 23-25	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 24-25	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-32	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-34	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-36	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-38	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-40	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-44	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-46	(Photo purchased/DOWL Archives.)
Jun 26, 1961	unknown	HNS 25-48	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 025	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 027	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 029	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 033	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 031	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 13, 037	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 021	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 023	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 025	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 027	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 029	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 031	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 14, 033	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 16, 002	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 16, 004	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 16, 006	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 17, 011	(Photo purchased/DOWL Archives.)
Jul 31, 1978	1:15,840	CN-HNS RL 1, 17, 013	(Photo purchased/DOWL Archives.)
Sep 2004	unknown	unknown	Photo from client

APPENDIX B.2
SITE RECONNAISSANCE NOTES

SITE RECONNAISSANCE NOTES

Project: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

By: Ms. Emily Creely and Ms. Rachel Cruz

Date: September 15, 2005

Weather: Clear, approximately 50°F

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9 a.m. Started site reconnaissance at MP 3.5.

General Observations and Comments

Except for specific areas described below, the overall appearance of the exterior and interior surfaces of the Property during the reconnaissance was clean and orderly. No discolored or distressed vegetation was observed.

Exterior Surfaces of The Property

Materials Stored On Site; Types and Apparent Management: The quality and performance of these operations serving the Property were not evaluated under this assessment.

Waste and Disposal Practices: The quality and performance of these operations serving the Property were not evaluated under this assessment.

UST Systems, Fueling, or Maintenance Operations: The quality and performance of these operations serving the Property were not evaluated under this assessment.

Topography, Drainage, and Storm Drainage Facilities: The natural topography of the Property has been altered by the construction of the highway. The roadbed is elevated above the natural topography of the surrounding area and in some instances this has changed the drainage patterns of adjacent waterways and runoff. In some areas, the roadbed acts as an impoundment. In general, drainage is toward the south and west.

Sewer, Water, Storm Drainage and Electric Facilities: The quality and performance of the utility systems serving the Property were not evaluated under this assessment.

Interior Surfaces and Spaces of the Property

No interiors were investigated.

Heating Systems and Fuels

The quality and performance of these systems were not evaluated under this assessment.

Storage Rooms and Contents

None were observed.

Transformer Rooms and Equipment

The quality and performance of this equipment was not evaluated under this assessment.

Waste Water and Process Water, If Any

The quality and performance of these systems were not evaluated under this assessment.

Drains or Sumps

With the exception of culverts, no drains or sumps were observed.

Areas Not Accessed or Viewed

Buildings located on private property were not investigated, including commercial and residential properties.

Special Indicator Features

Except for the comments with respect to the following areas, the overall appearance of the exterior and interior surfaces of the Property during the reconnaissance was clean and orderly. No discolored or distressed vegetation was observed.

Site 1: A cabin has been constructed just off the shoulder in a parking area.

Site 2: Six 55-gallon drums were found between the road and the developed area of the Southeast Roadbuilders property.

Site 3: A cabin (a potential squatters cabin) has been constructed in a heavily wooded area between the road and the river. Associated debris includes appliances, car parts, and a footpath made of wood.

Site 4: An illegal dumping area that contained batteries, firepit, filled soap buckets, and other debris.

Site 5: Between the road and the mountainside, a small shed has been built that is a hydroelectric generator. Associated material includes metal piping, a drum, and other mechanical equipment.

Site 6: On the shoulder between the highway and the river is a recently used firepit and old trailer.

Site 7: A large area that contains a dilapidated old home site was found between the road and the mountains. Associated debris included one drum, a partially collapsed house, car, and shed with one old drum. A smaller building was also observed up the hill.

Site 8: An illegal shooting range was observed on the mountainside of the highway.

Site 9: Between the highway and the river is a large parking area with signs of illegal loitering, which included a burn pile approximately 15x10x5 feet large, a used trailer and associated machinery, and a pit that appears to be an old outhouse site.

Site 10: An abandoned car was observed in the heavily wooded area between the highway and the mountains.

Site 11: Two porta-potties were observed on the parking area between the river and the highway.

Site 12: At the Klukwan turnoff, an area was observed that contained multiple vehicles, oil buckets, and associated debris.

Site 13: A large area that contains a dilapidated house, shed, truck, and trailer.

Site 14: An old abandoned structure was observed between the highway and the mountains.

4 p.m.: The site reconnaissance was completed.

APPENDIX B.3
PERSONAL INTERVIEWS

PERSONAL INTERVIEW

With: Mr. Roger Ingledue
Foreman, DOT&PF
Phone: 907-766-2340

By: Ms. Emily Creely
DOWL Engineers

Project: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

Date: September 15, 2005 – 4p.m.

Mr. Ingledue is the Foreman of Maintenance and Operations for the Client and has been involved with the daily maintenance and operation activities conducted on this site for 10 years. I asked him if I could interview him with respect to his personal knowledge of the Property's history. He agreed and the following interview was then conducted over the phone.

Q. What can you tell me about the pipeline?

A. It was built between 1940-1950 by the USACE. It went from tank farm to tank farm in Lutek Inlet. Fuel by barge went into tanks then pumped into the eight-inch pipe to Fairbanks. It's been out of service a long time. In some places they have placed power and telephone wiring in the old pipeline, as it's an ideal situation. Some of the pipeline was dug up due to construction.

Q. What is that generator building (on sheet 6)?

A. It's a private person, I think his name is John Floresky. It's hydroelectric when the generator is not running. It runs off water.

Q. Why are the 'party spots' so close to the road – as if there is no fear for being told to leave?

A. We don't have a trooper anymore – just an ADF&G trooper.

Q. Do you know of any previous studies done along this stretch of the highway?

A. At the Chilkat bridge there was a water study done by the ADEC to permit the tour business operating on the river.

Q. What type of vegetation control is done on the highway?

A. In most areas it's cut back for four passes, which is about 12-15 feet, except corners where you go for 20 feet. We like to do it every year, but a lot of times the snow chases us out.

PERSONAL INTERVIEW

With: Ms. Anne Marie Palmieri
ADEC Contaminated Sites
Phone: 907-766-3184

By: Ms. Emily Creely
DOWL Engineers

Subject: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

Date: October 24th – via email

Mr. Palmieri is the ADEC staff responsible for Haines area contaminated sites and LUST sites. Location data was missing from online records regarding three sites potentially within the Property and I confirmed their location with her:

Email to Ms. Palmieri:

"I'm working on a site assessment for highway improvements to the Haines Highway. I am searching for existing environmental conditions and a search of the ADEC's LUST database came up with these sites: Haines One-Mile Lift Station, Northern Timber Corporation – Haines, and ADOTPF-Haines Maintenance Station.

I need to know where these sites are actually located so I can see how close to the highway it is or whether or not these sites are within 300 feet of the highway between Mile Posts 3.5 to 25.3."

Ms. Palmieri responded via email:

"In response to your inquiry:

Haines One-Mile Lift Station is at 1.0 Mile along the highway. Northern Timber was a stockpile located at the Southeast Roadbuilders yard at 4 Mile and was rather close to the road. The contaminated soil came from 4 USTs at other businesses in town and ended up being treated there. The site has been closed; the soil met method two cleanup levels.

I'm not sure about the disposition of the soil...you would need to ask Southeast Roadbuilders what happened to it. We weren't concerned because it met our default cleanup levels.

The ADOTPF site is located at 0.75 Mile in town at the DOT shop. There is a small bit of contaminated soil remaining after an UST was removed.

There is also some groundwater contamination. So...it looks like the only site in your area of concern would be the Northern Timber site, which is closed. Let me know if you have further questions. Anne Marie."

A follow up email occurred on October 26, 2005:

Q: Is this a state contaminated site or classified as something else? Was this the reason it's on the CERCLIS registry?

A: The pipeline is not a Superfund site, but it is listed on CERCLIS. It is not on our database as there has been no contamination found to date.

Q: Was dioxin the only contaminant of concern?

A: No contamination was found with the dioxin study, but now we are looking for petroleum. Yesterday, I was out with the USACE scouting locations for their direct-push field investigation next week. They will be working at areas where there were documented historic spills and valve locations. Some of the areas of concern will be investigated next week and others will be delayed until next spring due to accessibility. The areas that will be investigated next week include: Young Road, Allen Road, Piedad Road, Highway Mile 18, and Wells Bridge at Mile 25.

The other areas include: Mile 15, Big Boulder Creek, Little Boulder Creek, and Mile 41. I don't have a work plan for this, but should get it in the next week or so. There may be other areas that they want to look at that I have inadvertently missed.

A follow up phone call on October 27, 2005:

Q: How close to the roadway is the pipeline?

A: Within 10 feet.

Q: Are any portions of the pipeline removed within the Property (MP 3.5 to MP 25.3)?

A: No – portions of it have been converted to a utility conduit near the Canada border.

Q: What program is this falling under?

A: FUDS – we are doing our regular oversight and ENSR will be completing the investigation.

A follow up phone call on March 1, 2006:

Q. Has any work occurred since October – any sampling on the pipeline?

A. Yes. The USACE did sampling in November and the report is in draft form. Give Melissa Markell a call to find out the results. They will go out again in the spring.

PERSONAL INTERVIEW

With: Ms. Randy Erickson
Biologist, Alaska Department of Fish and Game
Phone: 907- 766-3638

By: Ms. Emily Creely
DOWL Engineers

Project: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

Date: March 1, 2006 – 10 a.m.

Mr. Erickson is a biologist in the Haines area and was the person that a worker reported soil contamination to at MP 17. I asked him if I could interview him about his knowledge of report of the contaminated soil and he agreed. The following interview was then conducted over the phone.

Q. Do you recall someone reporting to you finding contaminated soil in the area of MP 17-18? You brought this up at the agency scoping meeting?

A. Yes. One of the workers came in and talked and told me that while they were working on putting power in the area, he found some soil that might be contaminated.

Q. When was this?

A. A long time ago, like the late 90s.

Q. Was this reported to anyone else? Was it confirmed or documented?

A. No. I went out to check it out and didn't see or detect anything, but that they had already filled in the ditch.

PERSONAL INTERVIEW

With: Ms. Melissa Markell
Environmental Engineer, U.S. Army Corps of Engineers (USACE)
Phone: 907-753-5615

By: Ms. Emily Creely
DOWL Engineers

Project: Phase I, Environmental Site Assessment
Haines Highway, Haines, Alaska
W.O. D59119B

Date: March 1, 2006 – 4 p.m.

Ms. Markell is the lead technician for the Haines Pipeline investigation. I asked her if I could interview her about her knowledge of the project and she agreed. The following interview was then conducted over the phone.

Q. What type of work has been done on the pipeline since October 2005 and was any contamination found?

A. We went out and investigated a number of sites in November and the bottom line is that we did not find any contamination above action levels, except for one location. We found hydrocarbons in the valve vault near Wells Bridge. The contamination is inside the vault and we didn't look outside the vault because it's full of powerlines.

Q. How close to the highway is this vault?

A. Between 10 and 20 feet. It's on the north side of the highway and east side of the road about 200 feet from the river.

Q. Is any more sampling planned?

A. Yes. We'll go out in May or June with a hand auger to figure out if the contamination is from a dripping valve, or if it's bigger from something else.

A follow up phone call on March 3, 2006, at 3:30 p.m. took place in which the planned sampling event in the spring was discussed.

Q. Can you tell me the other areas that you sampled in November and where you plan to sample in the spring?

A. We sampled in five spots in November and of these, just two are in your study area. Aside from the valve vault location we discussed, we also went to an area around MP 17.5. We had some low-level hits, but we really didn't find anything. We will return there in the spring to explore the area a little bit just to make sure there isn't anything else. In the spring we are going to two locations in your study area that we did not sample in November and they are known to have previous spills. The first is called 'release 6.5' and the second is called 'release 17.7'. The '6.5 site' is just south of Southeast Roadbuilders

near the creek, just off the shoulder. The '17.7 release' is a big site and one that is being evaluated to determine if it needs to be a contaminated site. The pipeline is buried at the base of the cliff and there was a spill there decades ago -- they trenched it and left the trench open. We will be sampling from utility box to utility box. I'll send you figures to show the general area where I'm talking about. It is at MP 15.5.

EMAIL RECORD

DATE: March 6, 2006
FROM: Melissa Markell, ACOE
To: Emily Creely
PROJECT: Haines Highway
SUBJECT: ACOE Sampling
EMAIL ADDRESS: Melissa.L.Markell@poa02.usace.army.mil

Ms. Ihlenfeldt responded to questions regarding the ACOE's sampling for the Haines-to-Fairbanks pipeline with the following email, which has been edited for clarity:

"The pipeline mile markers do not match up with the highway mileposts. Release 19.5 is at pipeline mile marker 19.5, which is highway milepost 17.5. Release 17.7 is at pipeline mile marker 17.7, which is highway milepost 15.5."

"For Wells Bridge, the valve vault is actually farther from the bridge on the curve of the highway near where that trail leaves the woods and meets up with the highway."

"At Release 17.7, we'll be sampling right along the highway, not way up on the mountain like your figure indicates. In the air photo, you can see toward the lower right hand corner where there is a line of trees with yellow leaves. This line of trees is right next to the highway, then cuts away, then comes back. There is a swamp between the line of trees and the highway. That's our site. The burn box is right in the middle of the swamp. The trees are growing along the berm that was created when the pipeline was dug up (it was never re-buried). Release 19.5 did have a historic spill which is why we're going back to look at it in more detail where we couldn't get the Geoprobe rig into the woods. The spill was up the hill from the abandoned cabin. We'll be looking at where we think the fuel pooled when it ran down the hill toward the creek."

1

MEETING RECORD

DATE:	May 8, 2006
WITH:	Melissa Markel (USACE), Rich Jackson (USACE), Kristen Hansen (DOWL), Keri Nutter (DOWL), Rachel Cruz (DOWL)
NOTED BY:	Rachel Cruz
PROJECT:	Haines Highway MP 3.5 – 25.3 (DOT&PF Project No. 68606)
SUBJECT:	**Environmental Contamination Encountered by Geotechnical Investigation**
WORK ORDER:	D59119B

Time: 9:00 a.m. **Place:** DOWL Engineers

DOWL is under contract to the Alaska Department of Transportation & Public Facilities (DOT&PF) for the design and environmental documentation of the Haines Highway MP 3.5 - 25.3 project. The purpose of the meeting was to inform the USACE (U.S. Army Corps of Engineers) regarding evidence of contamination that was encountered during the Haines Highway MP 3.5 – 25.3 geotechnical investigation. The USACE was contacted about the environmental contamination, and not the Alaska Department of Environmental Conservation (ADEC), because research for the Phase I Environmental Site Assessment of the project area discovered that the USACE is investigating the area as part of their Formerly Used Defense Sites (FUDS) program. DOT&PF directed DOWL to coordinate with the USACE.

Keri Nutter explained to the USACE what she encountered at the Haines Highway Mile Post 15.5 (pipeline mile 17.7). The following is her account of events. “We offloaded the Nodwell from the tilt bed on the north side of the Haines Highway near MP 15.5. The Nodwell was walked down the road embankment and placed into position on top of Peat Probe 102. As with the previous peat probes in the project area, we set up to sample with an SPT (Standard Penetration Test) at the surface. We drove the SPT 24" to 2'. The sampler was presented to me (about 5 feet from the drill rig) and I proceeded to open the sampler and log the sample as normal. (this sample contained 6" of frozen peat and 18" of silt with sand and ~15% organics such as plants and rootlets). The driller then proceeded to auger down to 5 feet using a 6" hollow-stem auger. The sampler and rod was placed down the auger and the sample was driven 24" at 5'. When the sampler was presented to me this time, I began to notice an exhaust or diesel smell and was developing a slight headache (as I normally do around diesel exhaust). Looking around, I thought that it was one of the trucks parked behind me on the side of the road running. None of the vehicles were on. I then looked at the drill rig to make sure that no fuel or oils were leaking. No leaks. By this point, the driller had noticed the smell and shut down the rig in case it

was an equipment leak; however, we could not find anything. I smelled the gloves that I was wearing (normal work gloves over purple nitrile) and noted the smell on them. I then wafted the sampler and caught a hint of the odor. This made me worry, so I went to the hollow-stem auger that was still to 5' in the ground and wafted the odor emanating from it. The smell was incredibly strong and I had to immediately step back. The driller, helper, and myself all began to feel headachy and slightly queasy at that point, so we put everything down and stepped back from the rig and took a few minutes to clear our heads. The driller and helper complained of a headache and nausea. I recommended to them to not smoke or touch their face, mouth, or skin. Once feeling better, I opened the sampler for the 5' sample (which was saturated - the rods were wet at 5'), and noticed the odor get stronger (it was obvious the soil was contaminated below the water table) as well as a rainbow/oily sheen on the sample and water. I immediately placed the sample into a plastic bag (just in case) and sealed it up tight with a "do not open" note. The drillers then quickly pulled the auger and slotted 3/4" PVC was placed in the hole for future locating.

Once we had a moment to feel better, we proceeded to the south side of the highway to Peat Probe 101. All of the tooling (the auger, auger bit, rod, rod bit, and sampler) was swapped out to avoid cross-contamination. As before, we drove the sampler for 24" from the surface, however, I did not get any recovery. As with standard procedure with no recovery, we augured to 2.5' and prepared to lift the auger and obtain a grab sample from the flights. As soon as the auger was pulled from the ground, the odor and rainbow sheen on the soil was apparent. The sample was wet (most likely from surface water). No sample was obtained from this hole. The auger was pulled and the hole abandoned at 2.5'. PVC was not placed in this hole.

We loaded the equipment back onto the tilt bed and the tooling was cleaned and the gloves we were wearing disposed. I returned to the hotel and phoned Maria Kampsen and informed her of the find. She then forwarded the information on to Kristen Hansen."

The interface of the organic and mineral layer was observed at 6" in Peat Probe 102 and at 18" in Peat Probe 101.

The USACE explained that there was a leak in the pipeline in this area and the contamination that she encountered is likely associated with this leak. ENSR will be field sampling areas along the pipeline (including the mile 15.5 area and near Wells Bridge) either in late May or early June. The USACE explained that the leaks associated with the pipeline are part of the FUDS program and due to priority and funding it could be some time before the USACE can clean up this site at mile 15.5. However, if it appears that that roadway construction would occur prior to the FUDS cleanup of this contamination, DOT&PF could reasonably expect the USACE to assume the primary responsibility in dealing with the contaminated soils. If DOT&PF would excavate and stockpile the contaminated soils, the USACE would haul the material away and handle the remediation of those soils. The USACE would also most likely provide a monitor during the excavation to direct the contractor in separating the contaminated soils from the clean soils.

Additionally, the USACE said that the report on the Wells Bridge area is finalized and will forward on to DOWL. The USACE will also send DOWL ENSR's workplan for this coming field season and the CRREL (Cold Regions Research Engineering Lab) report that includes historical contamination in the pipeline area.

DOT & PF Project No. 68606

Scale: 1:20400
October 28, 2005

W.O. D59119
Filename :Figure_4b.mxd

Approximate Location of Burn Box

Approximate Locations of Encountered Product by DOWL

Location Map

APPENDIX B.4

SITE PHOTOGRAPHS

(with Site Sketch Showing Photograph Points and Numbers)

Photograph No. 1 Location: Site 1 Direction: Facing southwest Comments: Cabin on Shoulder	
Photograph No. 2 Location: Site 1 Direction: Facing southwest Comments:	
Photograph No. 3 Location: Site 2 Direction: Facing northeast Comments: Drums	

Photograph No. 4 Location: Site 2 Direction: Facing northeast Comments:	
Photograph No. 5 Location: N/A Direction: Facing southeast Comments: Photo of pond on property	
Photograph No. 6 Location: N/A Direction: Facing east Comments: Photo of pond on property	

Photograph No. 7 Location: Site 3 Direction: Facing west Comments: Squatters cabin	
Photograph No. 8 Location: Site 3 Direction: Facing south Comments:	
Photograph No. 9 Location: Site 3 Direction: Facing west Comments:	

Photograph No. 10 Location: Site 3 Direction: Facing west Comments:	
Photograph No. 11 Location: Site 4 Direction: Facing west Comments: Soap buckets	
Photograph No. 12 Location: Site 4 Direction: Facing east Comments:	

Photograph No. 13 Location: Site 4 Direction: Facing west Comments:	
Photograph No. 14 Location: Site 5 Direction: Facing southeast Comments:	
Photograph No. 15 Location: Site 5 Direction: Facing west Comments:	

Photograph No. 16 Location: Site 5 Direction: Facing north Comments:	
Photograph No. 17 Location: Site 5 Direction: Facing east Comments:	
Photograph No. 18 Location: Site 6 Direction: Facing west Comments:	

Photograph No. 19 Location: Site 6 Direction: Facing northwest Comments:	
Photograph No. 20 Location: Site 7 Direction: Facing northwest Comments:	
Photograph No. 21 Location: Site 7 Direction: Facing northwest Comments:	

Photograph No. 22 Location: Site 7 Direction: Facing east Comments:	
Photograph No. 23 Location: Site 7 Direction: Facing south Comments:	
Photograph No. 24 Location: Site 7 Direction: Facing east Comments:	

Photograph No. 25 Location: Site 7 Direction: Facing east Comments:	
Photograph No. 26 Location: Site 7 Direction: Facing southwest Comments:	
Photograph No. 27 Location: Site 8 Direction: Facing east Comments:	

Photograph No. 28 Location: Site 8 Direction: Facing east Comments:	
Photograph No. 29 Location: Site 9 Direction: Facing northwest Comments:	
Photograph No. 30 Location: Site 9 Direction: Facing northwest Comments:	

Photograph No. 31 Location: Site 9 Direction: Facing north Comments:	
Photograph No. 32 Location: Site 9 Direction: Facing west Comments:	
Photograph No. 33 Location: Site 9 Direction: Facing southeast Comments:	

Photograph No. 34 Location: Site9 Direction: Facing south Comments:	
Photograph No. 35 Location: Site9 Direction: Facing south Comments:	
Photograph No. 36 Location: Site9 Direction: Facing south Comments:	

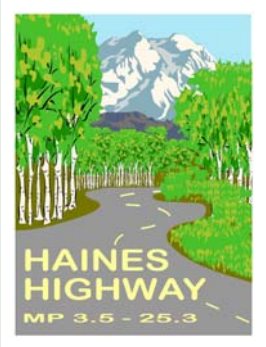
Photograph No. 37 Location: Site 9 Direction: Facing southwest Comments:	
Photograph No. 38 Location: Site 10 Direction: Facing east Comments:	
Photograph No. 39 Location: N/A Direction: Facing west Comments: Photo of ADF&G trailer	

Photograph No. 40 Location: Site 12 Direction: Facing west Comments:	
Photograph No. 41 Location: Site 12 Direction: Facing east Comments:	
Photograph No. 42 Location: Site 12 Direction: Facing east Comments:	

Photograph No. 43 Location: Site 12 Direction: Facing south Comments:	
Photograph No. 44 Location: Site 12 Direction: Facing east Comments:	
Photograph No. 45 Location: Site 12 Direction: Facing south Comments:	

Photograph No. 46 Location: Site 12 Direction: Facing south Comments:	
Photograph No. 47 Location: Site 12 Direction: Facing south Comments:	
Photograph No. 48 Location: Site 13 Direction: Facing east Comments:	

Photograph No. 49 Location: Site 13 Direction: Facing north Comments:	
Photograph No. 50 Location: Site 13 Direction: Facing east Comments:	
Photograph No. 51 Location: Site 14 Direction: Facing east Comments:	


HAINES
HIGHWAY
MP 3.5 - 25.3