CULTURAL RESOURCES REPORT COVER SHEET

Author: Christopher Landreau

Title of Report: Archaeological Review and Inventory of the City Heights Development Project, Cle Elum, Kittitas County, Washington

Date of Report: 8-14--2009

County (ies): Kittitas Section: 25,26,27 Township: 20 Range: 15E E/W

Quad: Cle Elum Acres: 202

CD Submitted? ☒ Yes ☐ No PDF of Report? ☒ Historic Property Export Files? ☐

Archaeological Site(s)/Isolate(s) Found or Amended? ☒ Yes ☐ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

DAHP Archaeological Site #:
Pending: No. 5 Slag
_____
_____
_____
_____
_____
_____
_____
_____

- Please submit paper copies of reports ***unbound.***
- Submission of PDFs is encouraged.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

Archaeological Review and Inventory of the City Heights Development Project, Cle Elum, Kittitas County, Washington

July 28, 2009

RLR Report 2009-156-17

By
Christopher Landreau M.S.

REISS-LANDREAU RESEARCH
PO Box 2215, Yakima, WA 98902
PH 509 952-5130 Fax (509) 498-9818 E-Mail: chrislandreau@charter.net

Consultation Provided to:
Sapphire Skies LLC
Cle Elum Washington

Executive Summary

The City Heights Project is a proposed development on 354 total acres in Cle Elum, Washington. The project is currently forested, with areas previously cleared for both mining, and two high voltage transmission lines (Puget sound energy, and Bonneville Power Administration). Reiss-Landreau Research (RLR) conducted a visual reconnaissance survey and inventory of proposed residential lots and proposed roadway in predominately steep (more than 8% gradient), sloped timber land in Kittitas County, Washington (Figures 1 & 2).. Of the project area, much of the lands are actually upon greater than 15% slope (Figure 3) and are considered generally low probability for cultural sites. Of the entire area, only 69.2 acres are found at 0-8% slope, and 19.6 acres at 8-15% slope. The rest (235 acres) is found at 15% or greater slope.

There are four plan alternatives, and Reiss-Landreau Research surveyed the one with the most acreage slated for development (Alternative A, Figure 4). The proponent has proposed residential lots within 171 acres across all landforms, and 32 acres of proposed roadway (202 total project acres). Reiss-Landreau developed a sampling strategy to allow a 100% sample at lower slopes, and gradually less at greater slopes. Since the planning includes use of nearly all of the flatter lands, the survey encompassed nearly all of the proposed residential lots.

Two historic features were noted and encountered in the field (Appendix C) as part of the City Heights inventory. Both of the features are slag pile complexes that relate to the historic mining industry predominate in this area. At the western end of the project area, direct effects will take place in relation to slag piles left by the No. 5 mine, and later strip mining activities. At the center of the project, previously recorded site 45KT1960 was encountered as well, and is considered potentially eligible as contributory to the No 7 mine to the north. Neither has any built infrastructure. There is no mitigatory action for slag, and it is not likely that important information can be derived from slag. Thus, even though the proponent plans to develop in Areas A and D (Figure 2), partial effects upon mining debris cannot be considered detrimental to the resource.

The preliminary research conducted at the State of Washington Archaeological archives in Olympia revealed eighteen recorded archaeological sites, and four heritage register sites within one mile of the project area. Most of the recorded sites in the area are historic in nature, and relate to the development of the city of Cle Elum, or the local mining infrastructure.

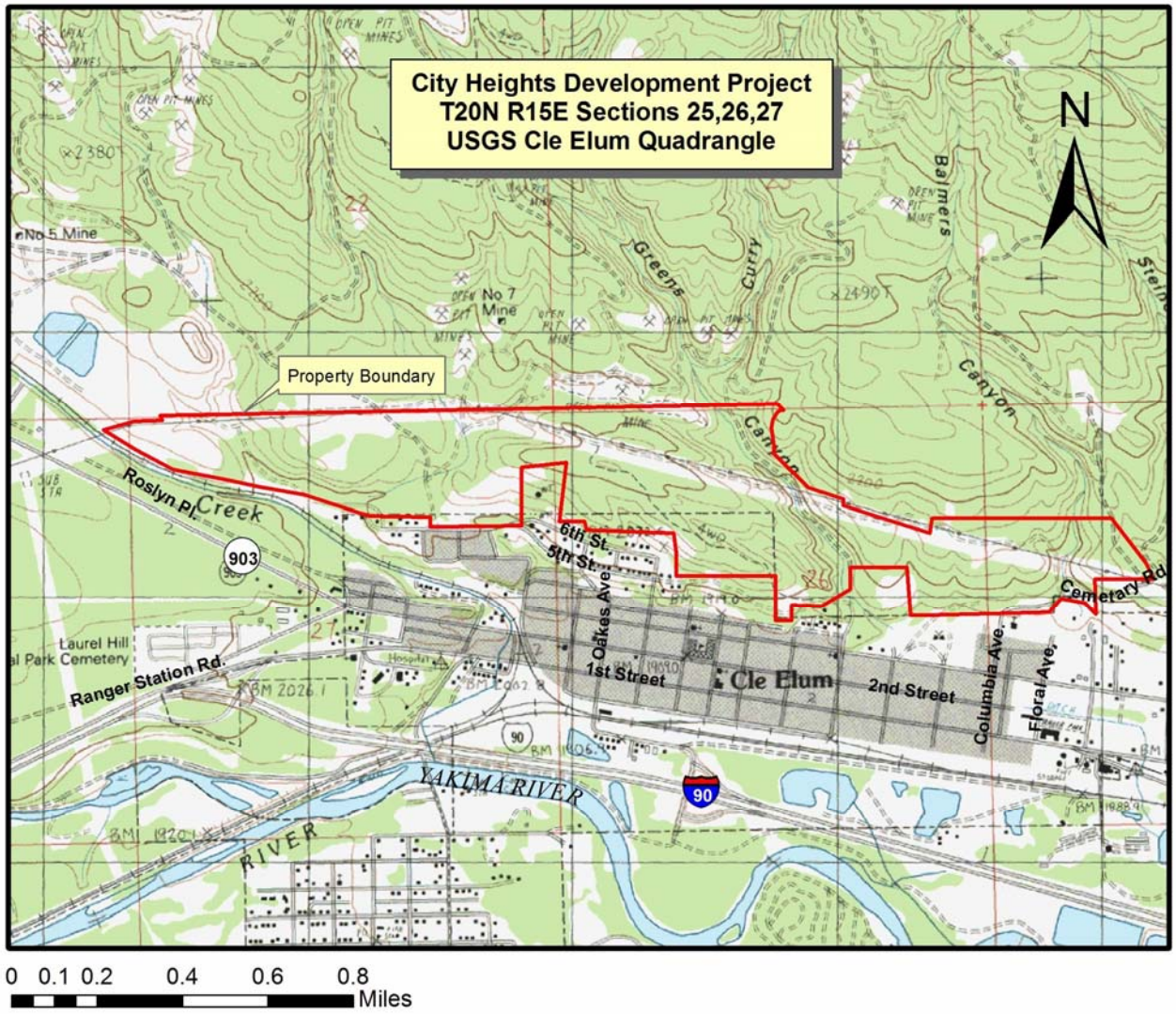


Figure 1: Project Boundary

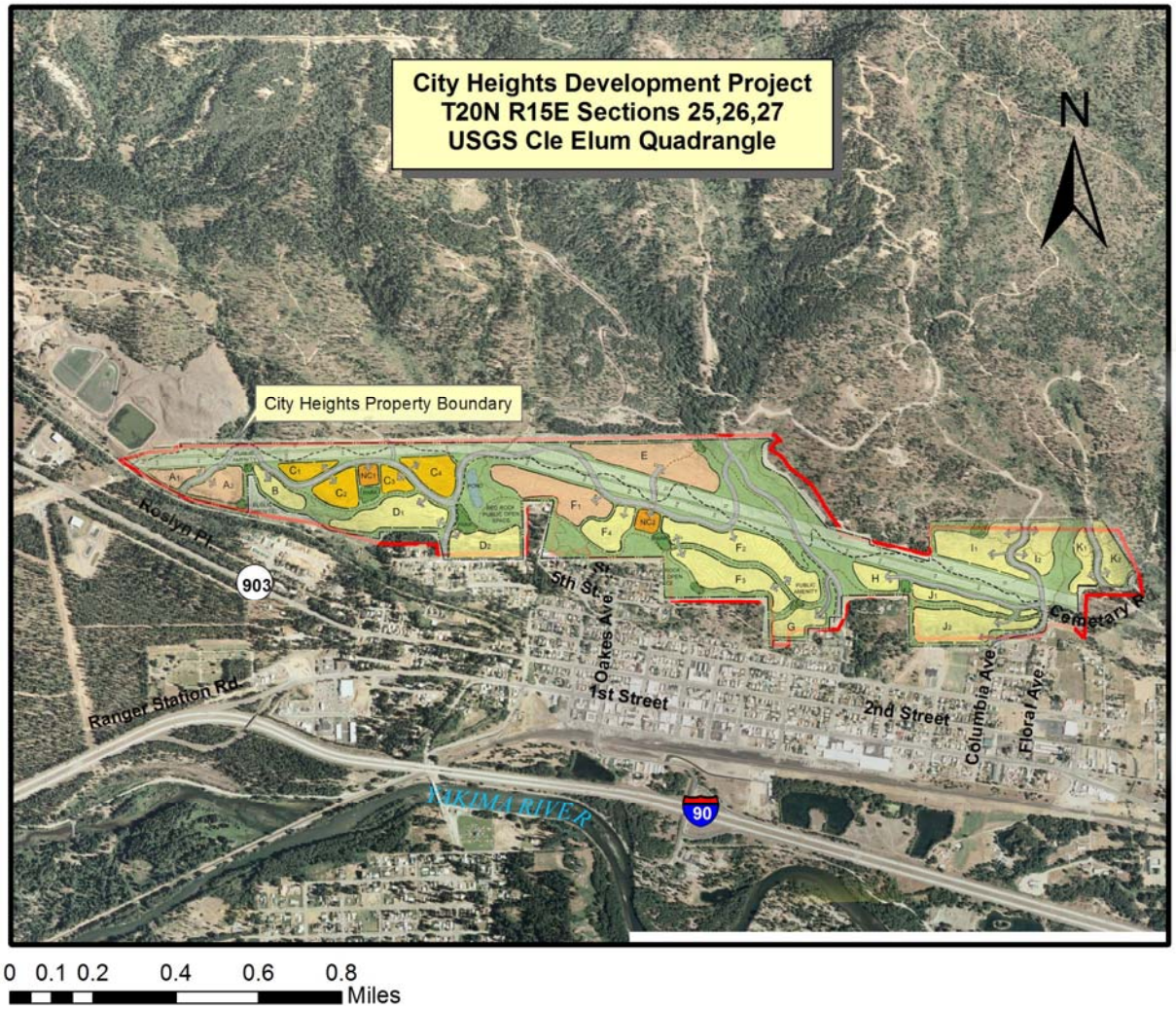


Figure 2: Conceptual use plan, preferred Alternative

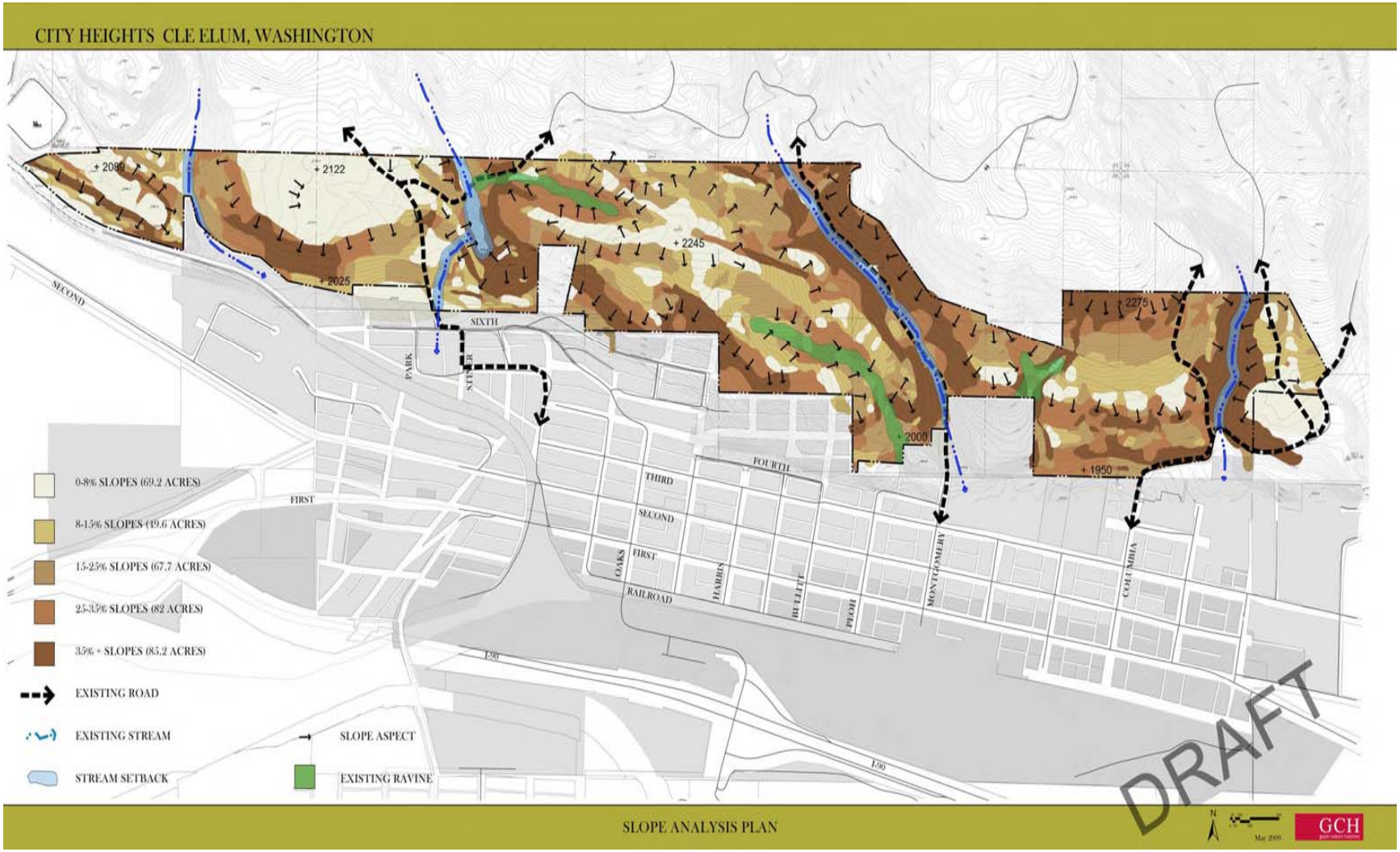


Figure 3: Slope within project area

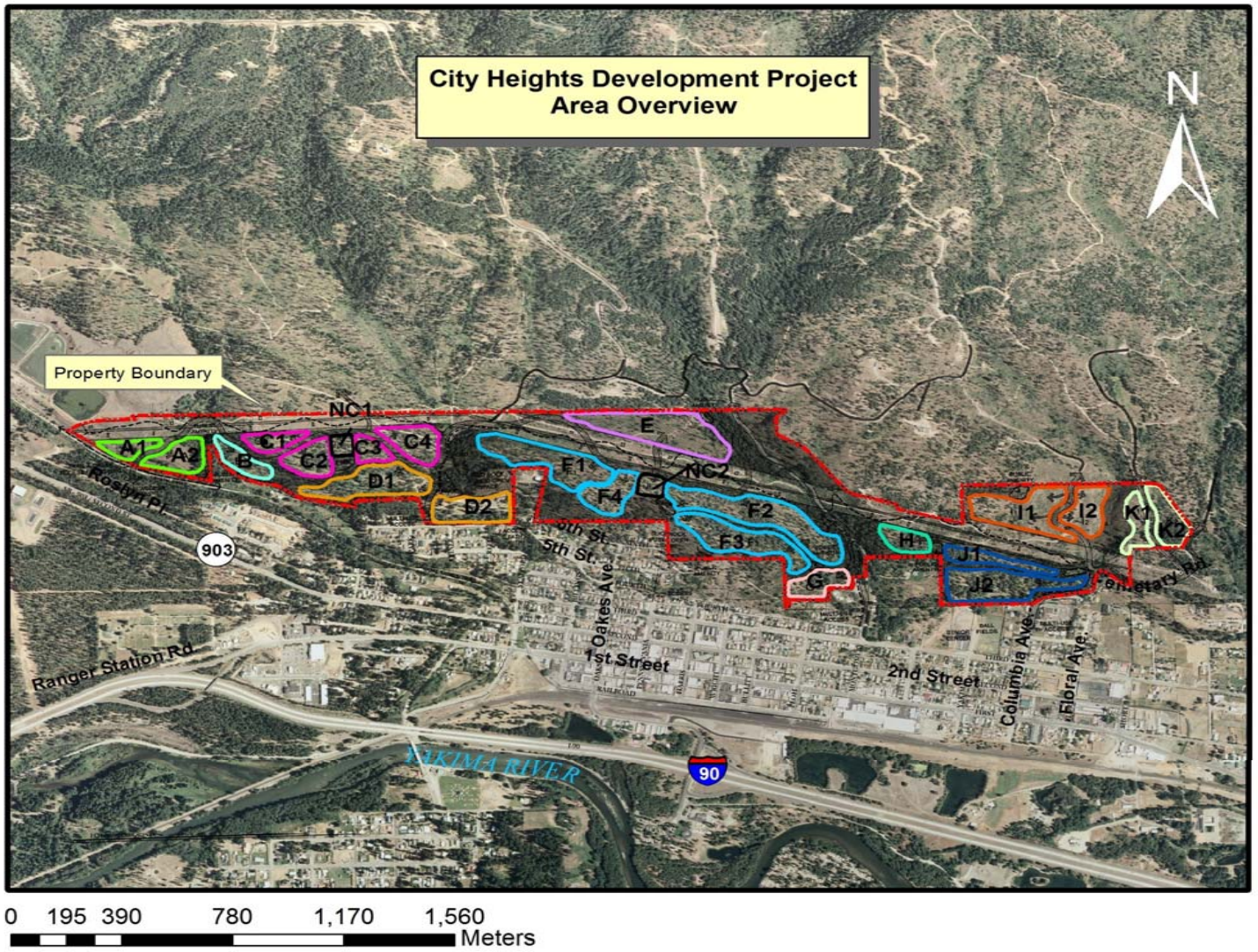


Figure 4: Proposed development areas in Alternative A.

Table of Contents

Legal Information:
Cle Elum WA, USGS Quadrangle

UTM: 10 06 56 854E 52 29 269N

Elev: 2,011 to 2,160ft

State Plane: T20N R15E Sections 25, 26, 27

Project Description

A. Project Activities: The conceptual master site plan Preferred Alternative for the City Heights project, submitted with the request for a Development Agreement, proposes approximately 690 single-family detached homes and 295 attached dwelling units for permanent residents and second homes. Some of the detached and attached units available as second homes may be sold in "fractional" ownership interests and may be rented for use by seasonal visitors. A small amount of neighborhood commercial development (approximately 20,000 square feet) is proposed to provide services to residents and visitors within the project. The Preferred Alternative will reserve approximately 152 acres (roughly 40% of the project site) in permanent open space or recreational use, including interconnecting trails with ties to the Coal Mines Trail and existing city streets, for pedestrian and bicycle use. Proposed trails will provide connections to and from the downtown core to planned public amenities within the development. Trails and open space within the project are intended for public use.

City Heights developable areas consists of approximately 202 acres of the 354 acres total area. The project proponents are seeking approval for up to 985 dwellings. There are four development alternatives for the Environmental Impact Statement (EIS).

Alternative 1 –Preferred Alternative (985 dwelling units, Figure 4); 20,000 sq. ft. of neighborhood commercial, and 152 acres of open space, trails, parks and public amenities.

Alternative 2 – Reduced Residential Density (875 dwelling units); 40,000 sq. ft. of neighborhood commercial, and 161 acres of open space, trails, parks and public amenities.

Alternative 3A – No Annexation, Development within the County under Single Ownership (essentially the same conceptual site plan as Alternative 2, different regulatory authority)

Alternative 3B – No Annexation, Development within the County under Multiple Ownerships (likely approximately 500 dwelling units, no coordinated system of road improvements or utilities infrastructure)

Alternative 4 – No Action (no annexation, no development at this time, continuation of existing conditions).

B. The Area of Potential Effect (APE): The archaeological inventory is projected to evaluate all of the proposed development areas of the largest and most broad Alternative, Alternative 1. For the purposes of this study, Reiss-Landreau Research endeavored to inventory 100% of land with <8% slope, 50% of lands between 8-15% slope, and sample 10% of lands above 15% slope within the entire project area (see Figure 3). The greater sloped areas are generally regarded as having less potential for cultural resources, although certain site types do occur at these elevations.

C. How the APE was determined: The APE was provided to Reiss-Landreau Research (RLR) by the project proponent.

D. Location and size (in acres) of the survey area: RLR was contracted to evaluate 171 acres of the planned development, and 32 acres of proposed roadway.

E. Project proponent, property owner, agency and compliance action: This review was initiated as part of the SEPA process, and will be used to prepare the Environmental Impact Statement (EIS).

F. Regulatory: This project is a Washington State Executive Order 05-05 project.

G. Survey personnel: Christopher Landreau, Ian Cain

I. What circumstances led to this survey: This project was a standard regulatory compliance project.

Environmental setting

Cle Elum is located in the Northern Cascades Physiographic region, which is characterized by recent (Pleiocene) uplift, and massive Cascade Mountain volcanoes (Lasmanis 1991). "A major northwest-southeast structural break separates the Washington Cascades into northern and southern portions. In a general way, the structure follows the trace of Interstate 90 between Seattle and Ellensburg. The North Cascades consist of jagged mountains with numerous glaciers and are composed predominantly of Mesozoic crystalline and metamorphic rocks." (Lasmanis 1991).

Region-wide interactions with glaciers during the last four glaciations within the current ice age have also modified the landscape. The last glaciation, at retreat left several natural deeply scored catchments, of which Lake Cle Elum (west of the project area) is one. During the last century, Lake Cle Elum was deepened by an artificially enhanced dam at its southern end, creating a substantially larger storage reservoir.

Easton Ridge is comprised in large part of Teanaway Formation deposits. These are basaltic in character. The rock typically occurs in brown, rusty, and reddish tones. Evidence strongly suggests that during the Eocene, between 49 and 37 million years ago, dikes associated with volcanoes conveyed lava to the surface in an area stretching roughly from Kachess Lake past Table Mountain to the Wenatchee vicinity (Mabry 2000).

This volcanic activity intruded upon an older geologic landscape of terranes. A terrane can be conceptualized as a large block or "island" of rock. These moved eastward with the Pacific Plate. Once the Pacific Plate encountered the North American plate, beginning roughly 100 million years ago, these blocks of rock were literally smashed against and in some cases pulled under rock formations of the North American plate. During this process, they were added or accreted to those formations. Tremendous pressure accompanied the collision. Strike-slip faults and thrust faults resulted. Geologic maps of the project areas, show various terranes and associated faults (Mabry 2000).

Faulting occasionally caused portions of the land to drop down or pull apart, forming basins. Sediments deposited in such depressions led to the creation of geologic formations. The Roslyn Formation, at 43 million years old, located near Lake Cle Elum, was one of these. It has been estimated at 9,000 feet thick in places. Rock types are primarily sandstone, siltstone, claystone, and shales. Veins of coal developed in the humid, subtropical environment that existed here (Mabry 2000).

The Pleistocene Period, which began approximately 2 million years ago and ended around 10,000 years ago, was a significantly colder era. This was a time of glaciation. The valleys containing Lake Cle Elum and Kachess Lake (which were created during this time) display the classic "U-shape" associated with glaciated alpine landscapes. Frigid temperatures occasionally yielded, however, to intervals of relatively warmer climate. At these times the glaciers would retreat. Meltwaters impounded behind terminal moraines led to the formation of Kachess Lake and Lake Cle Elum (Bureau of Reclamation 2006).

Vegetation:
Ponderosa Pine (*Pinus ponderosa)*, Douglas-fir (*Pseudotsuga menziezii*), vine maple (*Acer circinatum*) and grand fir (*Abies grandis*) are the primary tree species on and around the site. This is a typical east slope, mid elevation Northern Cascades plant community.

Cultural Setting

As the last Ice Age receded 10-15,000 years ago, ice-bound landscapes were gradually replaced by tundra-like expanses of grasses and cold-tolerant trees such as spruce (Hodges et al. 2003). Peoples using Clovis projectile points to pursue large grazing animals such as mammoth were in the Wenatchee area 11,500 years ago. People were hunting around Lake Cle Elum 11,000 years ago (WSDOT 2006).

A warm stretch of weather known as the Altithermal occurred from roughly 8,000 to 4,500 years ago. Native American use of "Cascade" type projectile points is associated with this period of increased aridity. Such points have been discovered along the edges of Kachess Lake (Hodges et al. 2003).

The period from 4,500 to 2,500 years ago is known as the Frenchman Springs phase. During this time, regional human populations grew and pithouses became more widespread. One house, estimated to be between 5,200 and 2,500 years old, was found near Lake Easton State Park, west of the project area (Hodges et al. 2003).

Between 1,000 years ago and the early 1800s, when European and American explorers began arriving, Native American populations continued to increase. Major native settlements came into existence along the Yakima River. Fishing was an extremely important activity. Large summer fishing villages were established at the lower ends of Kachess Lake and Lake Cle Elum. Additionally, people harvested plant and animal foods in upland areas in season. Vicinities around Lake Cle Elum and Kachess Lake were utilized by both Kittitas and Snoqualmie groups (WSDOT 2006; Hodges et al. 2003).

The arrival of Lewis and Clark at the beginning of the nineteenth century heralded great changes for native peoples. Native communities were decimated by disease. Missionaries moved into the region in the 1830s and 1840s. Settlers also came, following close behind the missionaries' footsteps. Desiring land, the U.S. Government pushed native groups on both sides of the Cascade Mountains to sign treaties. This was accomplished in 1855. Reservations were created for the Yakama, Kittitas, Snoqualmie, and other groups in the Pacific Northwest.

Non-native peoples did not delay in exploiting resources on lands ceded by Indians. Gold was discovered in Swauk Creek in 1867. By the 1870s miners flooded into the area and began working claims along the Yakima and Cle Elum rivers (Hodges et al. 2003). Logging camps were established around Lake Cle Elum and Kachess Lake. Ranching provided meat to both mining and logging communities. With the arrival of the Northern Pacific Railroad in 1886, ranchers could sell cattle in eastern markets (WSDOT 2006).

To encourage railroads to extend their lines, the Federal government provided them with a means of raising capital through land sales. Rail companies were given every other section on either side of the tracks (Draffan 1998). The Northern Pacific Railroad thus came into possession not only of forested lands, but also of lands containing coal. The Northern Pacific wasted no time. Coal mining began in 1886. Rails were constructed to the towns of Cle Elum and Roslyn. Like cattle, coal was sent by rail to eastern markets. By the early twentieth century, coal production reached more than one million tons each year. Coal mining crested in the 1920s. With oil effectively competing with coal as a fuel source in the 1930s, coal mining began to decline though it persisted in the Cle Elum-Roslyn area into the 1960s. Slag piles found in these communities are a visible reminder of this history (WSDOT 2006).

The NWI Hill and Dip Mine No. 7 was constructed in 1907, and quickly became an important socioeconomic and political feature of this landscape, as it was the biggest producer of coal in the entire Cle Elum deposit. Although the mine closed in 1936 (Operation Cooperation 1955), slag was deposited within the Area of Potential Effect (APE) for the City Heights project (45KT1260). Mine No. 7 was for the most part located well north of the APE, but shafts run deep underneath the City itself from that mine, and likely throughout the project area. West of the project, and within the western boundaries in area A1 and A2 (Figure 4) are slag remains from mining related to NWI Mine No. 5, which operated till 1947. Strip mining of this material began in 1944 and continued into the 1960's (Operation Uplift, 1955)

In addition to coal production and active logging operations, the early twentieth century witnessed the construction of dams on Kachess Lake and Lake Cle Elum. These were part of Federal programs intended to increase agricultural productivity across the arid West. A reservoir was built at Lake Kachess in 1912. Lake Cle Elum was dammed in 1933. This provided precious water to downstream farms and orchards at places like Thorp, Ellensburg, and Kittitas.

Just as coal faded as an economic powerhouse in the area, logging has diminished in importance. This places great stress on once-thriving logging communities like Easton. It was born as a logging camp located at the confluence of four railway lines. Easton was the final stop for trains before they headed west over Snoqualmie Pass (WSDOT 2006).

Major logging corporations like Plum Creek (a direct descendant of the Northern Pacific Railroad and its landholdings) recognize that the heyday of timber operations is past. While Plum Creek still harvests timber, an increasing corporate focus is to on sell unprofitable lands and/or transform them into recreational and/or homesite properties.

Archaeological sites found in the eastern Cascade Mountains and foothills reflect the diversity of fish and game that surely must have been present pre-contact, and are reflective of a rich ecological hotspot, as any river-fed lake must be. Water flows, prior to damming were unimpeded to the Pacific Ocean from both the Yakima and Columbia River basins and sub-basins. This once allowed anadromous fish a direct avenue to enter their preferred upland spawning areas.

Native Americans were seasonally nomadic into the central Cascades, allowing them to acquire warm weather food resources like berries and salmon, in the relative cool of the mountains. Vast trail systems would have led to Lake Cle Elum, from lower winter villages of the Kittitas and Yakima Valleys.

Literature Review

Known Archaeological sites within one linear mile of the project area. Note: This is a mixed use residential/commercial development project in a forested context. There are several historic dwellings of National Significance within the City of Cle Elum that will not be affected by this project.

45KT2100, and 45KT1960 are a series of features related to the No. 5, and No 7 mines respectively. 45KT2100 was recorded outside of the APE, and 45KT1960 within. Reiss-Landreau Research recorded additional features within the City Heights Project area in relation to the No. 5 mine, and noted 45KT1960.

North of Cle Elum, a shaft of the NWI Mine No. 7 was recorded in 2000 **(45KT2072).** This type of site is common throughout the area, and also may be seen as contributory to any potential district, if such is determined at a later date.

West of Cle Elum, and South of Roslyn, the No. 9 mining complex **(45KT1380)**, and associated rail lines (**45KT2710),** remain as visible landscape features. Both of these may be seen as contributory toward a local mining district.

Also, between Roslyn and Cle Elum a variety of historic surface refuse scatter features **45KT2095, 45KT2096 45KT2097**, **45KT2098**, **45KT2079** and **45KT2080** were recorded in 1998. In 1999 **45KT2074, KT2075,** and **KT2076**, also secondary refuse scatters were recorded in a large area between Cle Elum and Roslyn.

The City of Cle Elum 1906 waterlines (**45KT2146**) were recorded in 1998, along with associated infrastructure, bridges etc. Also in the city, the historic Northern Pacific/ Burlington northern Santa Fe Railroad lines **(45KT2786)** were recorded in 2008.

An isolated chert reduction flake **(45KT1361)** was located in 1997 west of the City of Cle Elum. Another isolated lithic was recorded as a site **(45KT1719)** in 1999, south of the city. Also, southeast of Cle Elum, across the Yakima River, a small lithic scatter **(45KT0823)** was recorded in 1989.

Historic Register Sites:

1.) The Kinney-Skinner Building, on East 1st Street, in Cle Elum was recorded to the Washington Heritage Register.
2,) The Cemetery Burial of Douglas A. Munro, in Cle Elum was recorded to the Washington Heritage Register.
3.) The Vogue Theater at 210 Pennsylvania Avenue in Cle Elum was recorded to the Washington Heritage Register.
4.) The Cle Elum-Roslyn Beneficial Association Hospital, 505 Power St. in Cle Elum, was recorded to The National Register of Historic Places in 1979.

Project reports within one linear mile of the City Heights project.

Adjacent south to the City Heights Project, Ozbun and Chapman (2002) investigated the area of potential effect for a proposed monopole cellular tower.

In 2001, a side channel of the Yakima River was investigated south of Cle Elum (Wilt and Roulette 2001), and no cultural resources were located. The project involved 10 meter visual transects. In addition, another inventory within the city limits identified a likely ineligible diffuse historic refuse scatter (Wilt 2001). An urban investigation along Oakes Avenue in Cle Elum, identified four historic properties, but recommended no adverse effects (Ferguson et al 2008a). A roadway project on the western end of Cle Elum was investigated using a pedestrian survey in 2002 (Miller 2002), and no cultural resources were identified.

The USDA Forest service recorded two eligible historic structures during a land disposal project south of the City heights project (Beidl 2005). Nearby, a pathway was constructed to connect the City of Cle Elum and three local schools (Ferguson et al. 2008b). 31 shovel probes, as well as a walkover transect survey were conducted, and no historic or precontact resources were identified.

Landreau (2008) assessed a tract for proposed development just north of the City Heights project area. The lands were steep and heavily timbered. No resources were located during the course of that survey. Miller (1997 and 1998) documented surveys for a variety of proposed timber sales for Plum Creek Timber Company. Several tracts were studied north of the City of Cle Elum, but no cultural resources were observed during the

course of study. Miller (2002) also conducted an archaeological study involving roadway improvements on the eastern edge of the city of Cle Elum. No historic properties were identified.

Research Design

Research goals and questions: RLR developed a hypothesis for this project, based upon the goal of cultural resources management in a steeply sloped and forested context in areas where there is no established investigative framework. The immediate goal is to evaluate the potential of this project area for the presence or absence of cultural resources.

Hypothesis: The cultural survey will provide discovery of aspects of pre-contact land use, as well as the built environment from the historic mining and timber harvesting of the project area.

Data required to address the hypothesis: To evaluate the potential of this project area for traces of the settlement past, RLR prepared a field survey, in conjunction with localized site research. This study can potentially aid in the reconstruction of past landscapes by identifying and recording elements of the archaeological record.

Inventory Methodology

A. Archaeological survey method: The survey methodology was determined by the surface visibility of the landscape, which was poor (10-45%) throughout. Ten meter transects were planned for the survey, which is standard for large forested tracts in the region.

B. **Shovel Test probes** were planned in areas of good potential (flatter slopes near water with poor visibility), and excavated to a width of 50 cm, and soils were to be removed at controlled intervals and screened through 1/8" mesh hardware cloth. RLR planned to shovel test soils on the lower flat drainage adjacent to the slag piles from the No. 5 mine at the western end of the project. This method, in conjunction with the surface survey allowed RLR a very good possibility of identifying undiscovered remains.

C. Depositional Environment: Local soils are influenced directly by the forested lands upon which they sit. Most are colluvial tills from the terminal Pleistocene glacial retreat in the area, and have been redeposited through wind and water action.

Survey Results (*Refer to Appendix A*)

A. Date of survey, Weather Conditions: June 23- 29, 2009, sunny

B. Field personnel: Christopher Landreau, Ian Cain

C**. Actual methodology employed:** The survey methodology was determined by standard methodology related to high acreage timber lands in Washington State. Surface visibility was 10-45% throughout and it was determined that a visual assessment was the most typical and acceptable approach in forest environments. Visual inspection and limited shovel test probes were utilized to determine presence or absence of cultural remains. Reiss-Landreau Research utilized GPS in the field to locate survey boundaries **(Appendix A)**. Overall, the following protocol was enacted:

1.) All lands, regardless of development planning, were surveyed using visual transects with the following caveats:

a.) All land 0-8% slope was surveyed using ten meter transects, with 100% coverage of the area.

b.) All land noted between 8-10% slope was surveyed using 30 meter (50% coverage) transects to determine the presence of built environmental features in a hillside context. Often, on steeper hillsides, non-systematic survey was employed to allow coverage of an area, and this generally involved following a trail or skid road

c.) Areas of greater than 15% slope were surveyed no-systematically, following forest skid roads, or other visible pathways on the slope

D. Pedestrian Survey Findings: Artifacts/ Features:

Area A1: This area features mining slag and tailing piles from Cle Elum Mine Number 5 which closed in 1948. We recorded a site form for the State of Washington (Number Pending, Figure 5), The area is quite disturbed.

Area A2: The small drainage between proposed development areas A2, and B was relatively flat along its bottom course. Natural cryptocrystalline cobbles were evident, but no flakes. Slag was the only cultural feature that may have been more than 50 years old.

Area B: This area featured some sloped hillsides, as well as a small meadow edge. RLR did not locate material over 50 years old here. This area was non-systematically surveyed using dirt tracks. Several modern middens or simple trash dumps were uncovered during the course of the survey, with mixed trash and debris. These dumps have been removed by the project proponent as of this writing.

Area C1-C4: In this area, we noted the highest level of modern trash. Several dumps, modern encampments, as well as evidence of drug use were noted. The area is notable, as it is the high terrace flat adjacent to the electrical transmission lines.

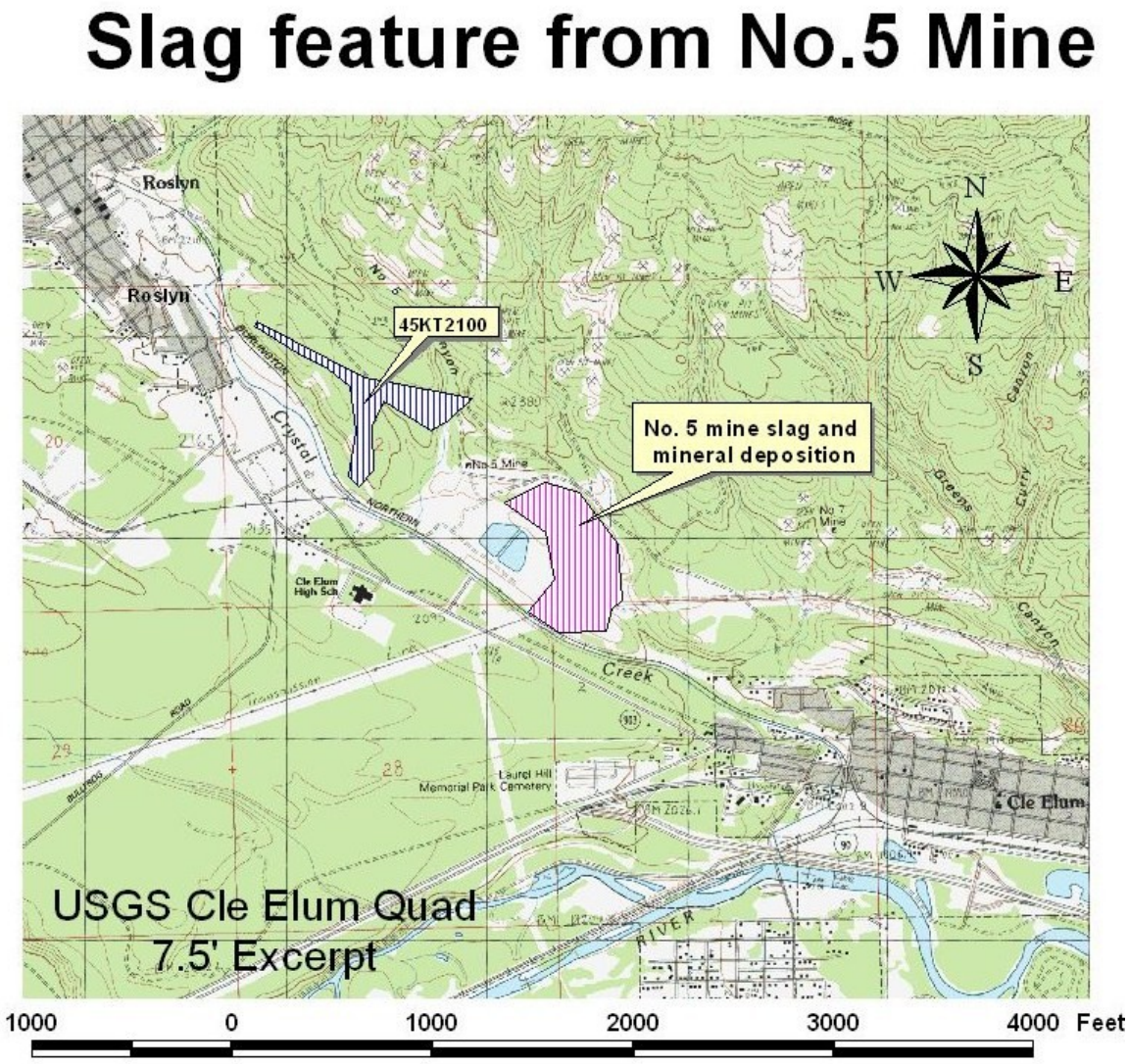


Figure 5: Slag and tailing features, located partially in Area A

Area D1: This area was not systematically surveyed given that its predominant slope was more than 15% grade. However, RLR did casually walk several skid roads within Area D1, and located no cultural material.

Area D2: This area is close to the contemporary urban boundary with existing City of Cle Elum homes and properties. It is steep, but several skid roads run through it, and Reiss-Landreau research was able to casually survey most of the slope. This is the section in which 45KT1960 is located. The site was recorded as a road bed and slag piles in 2002, and no changes appear to have happened at the site as of this writing.

Area E: Portions of Area E were surveyed casually, but overall the slope exceeded 8 to 15%, and was more than 20% in places. RLR failed to locate any cultural properties in this section.

Area F1-F4: This area marks a large section of the proposed Preferred Alternative for City Heights. It is flat to moderate sloped land, overlooking the valley containing the city of Cle Elum. Evidence of logging skid roads and logging features were present in this area.

Area G: This survey area was non-systematically walked, but as steep slopes were prevalent, no intensive survey using transects was required here.

Area H: This area represents a small upland flat between the ridgeslope to the south, and the electrical transmission line corridor. There was a small modern (1970's?) can dump at the wooded margin of the power transmission corridor, otherwise no features were noted.

Area I1: This area has just a small portion adjacent to the transmission lines that was not 8% or greater slope. RLR casually walked the upper end of the proposed development area, but the incline was relatively steep, and additional survey was not called for here.

Area I2: This area was remarkable for the presence of a long raised bench in the center, but was sloped on three sides. RLR did not locate any cultural evidence at this locale.

Area J1: Like Area H, this was a sloping raised bench between the transmission line corridors and the slope to the city of Cle Elum. No cultural material was located.

Area J2: RLR non-systematically walked this area; however, as many portions exceeded 12 to 15% gradient, transects were not called for on this wooded slope.

Area K1-K2: These two development zones represented the easternmost section of the City Heights project. The zones are relatively flat, and had better than 50% surface visibility in places. Area J2 has evidence of recent earth moving activities, and there are quite a few impromptu dumping areas in this zone.

E. Shovel probes: Two shovel probes (Figure 5, Appendix B) were excavated in a small hollow along the westernmost (unnamed) drainage of the project area (Fig 5).

Shovel probe 1: 10r33 silt and clay with 10r5/4 silt, 7.5y3/1, mixed mill to 50 cm. No cultural materials were identified aside from coal slag.

Shovel probe 2: 10r33 silt and clay to 85 cm. Coal slag was evident.

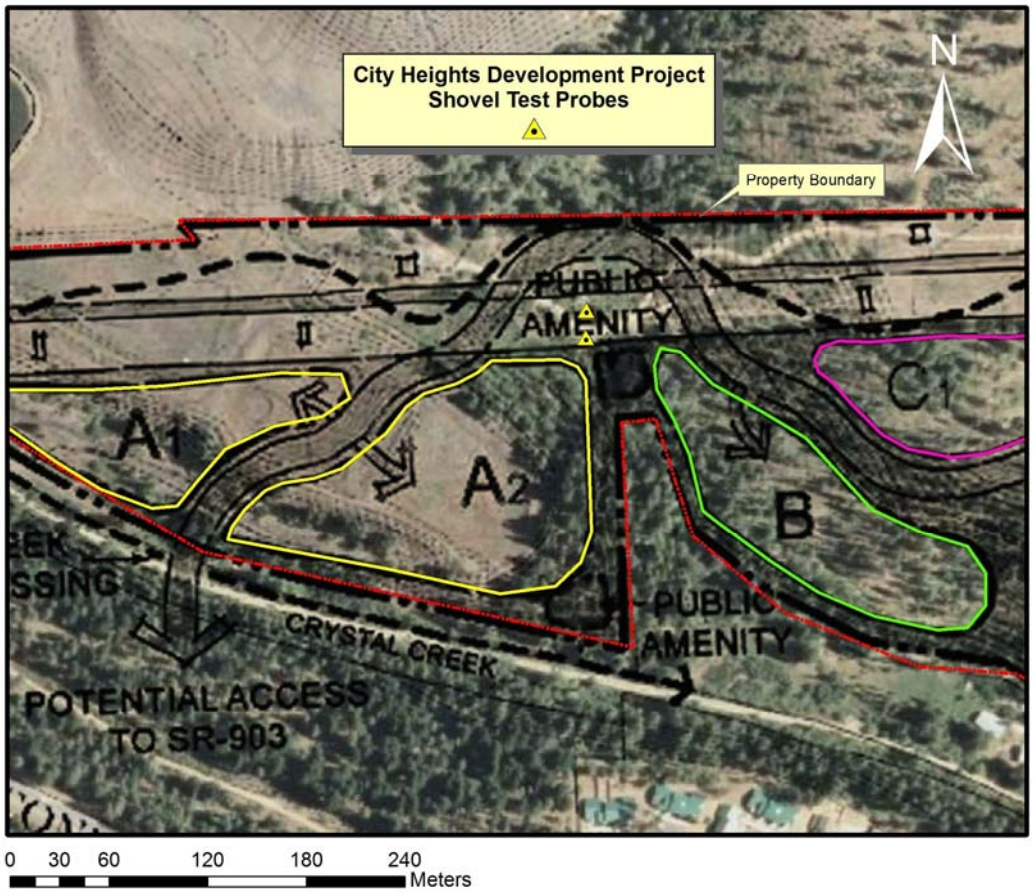


Figure 6: Shovel probes

Project Recommendations

The two mining features (tailing and slag dumps 45KT(Site No. Pending), and 45KT1960)), are both contributory to much larger sites, the No 7 mine and the No 5 mine, of the Northwest Mining Improvement Company. As individual features themselves, they are disturbed and may lack requisite site integrity, but both may contribute to the mine complexes as feature. It is possible that the Cle Elum Mining district is eligible as a historic district, much like the already recorded Roslyn Mining District to the west.

The entire City Heights Project area, though not directly utilized by surface mining projects, is criss-crossed with deep shafts visible on area mining maps. Clearly, as a piece of a whole, this project area may fall within any potential historic district, and surface features should be viewed with this in mind.

Given that these features are potentially contributory to the greater Cle Elum Mining District, it is recommended that they be avoided until such time as the entire district is

documented and recorded, and a mitigation plan for associated features can be developed. Thus, the piles should be avoided in both Area A and in Area D2.

No further cultural resources were identified during the course of this survey. If the two mining sites are avoided until mitigated, there will be no direct effects and Reiss-Landreau Research (RLR) recommends of finding of NO ADVERSE EFFECT upon cultural resources for the purposes of this proposed development. However, potential always exists to encounter buried or otherwise hidden cultural features during the course of construction. We recommend that at any time during the project, should human or unknown bone be uncovered, or deeply buried cultural deposits encountered, a professional archaeologist should be called, and work should stop until the material is evaluated, and State of Washington procedures for inadvertent discovery are initiated.

Inadvertent Discovery Procedure.

If any archaeological resources are discovered or suspected during the course of the project, activity in the immediate area shall stop until a professional archaeologist can asses the discovery.

If the inadvertent discovery is Archaeological material:

1. The project proponent and the Washington State Department of Archaeology and Historic Preservation (DAHP) will be contacted and work in that area will stop.

2. The archaeologist will contact the Project Proponent Northland Resources and the City of Cle Elum.

    a. Upon notification of discovery of potential archaeological deposits, the professional archaeologist will contact the Yakama Nation. Parties will be contacted by telephone.
    b. The DAHP and the Yakama Nation will be given the opportunity to view the artifacts within 48 hours after the discovery or at the earliest possible time thereafter. The discovery will be kept confidential. After halting construction, securing the site, and notifying the contractor, the archaeologist will conduct a brief in-field evaluation. The purpose of the evaluation is to determine whether the discovered resources have potential to answer research questions.
    c. Evaluation protocols are described in the following section.
    d. If parties agree that the artifacts are not significant, RLR will ask the construction representatives to resume construction.
    e. If parties agree that the artifacts are significant, the City of Cle Elum or the Washington State DAHP will issue a stop work order until further notice for all construction work in the area defined as a significant site.

Guidelines for the Discovery of Human Remains:

1. All persons who know of the existence and location of human remains must, by law, **notify the County coroner and local law enforcement**. This must be done in the most expeditious manner possible. (RCW 27.44; 68.50; 68.60)

2. Any person engaging in ground disturbing activity that encounters skeletal human remains must **cease all activity which may cause further disturbance to the remains, make a reasonable effort to protect the area from further disturbance, report the presence and location of those remains to the coroner and local law enforcement** (RCW 27.44; 68.50; 68.60). The remains should not be touched, moved, or further disturbed.

3. The County coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. (RCW 27.44; 68.50; 68.60)

4. If the county coroner determines the remains are non-forensic, then the Department of Archaeology and Historic Preservation will take jurisdiction over the remains. (RCW 27.44; 68.50; 68.60)

5. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to the affected parties. (RCW 27.44, 68.50; 68.60)

6. The DAHP will handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains if there is no federal agency involved.

Bibliography

Beidl, Jacqueline
2005 *Cle Elum Disposal Project: Heritage Resource Consultation Report*. Cle Elum Ranger District, Okanogan-Wenatchee National Forest, Kittitas County, Washington

Bureau of Reclamation.
2006 "Dams, Projects and Power Plants." http://www.usbr.gov/dataweb/dams/wa00274.htm. Date accessed: September 15, 2006.

Draffan, George.
1998 Taking Back Our Land: A History of Railroad Land Grant Reform. takingback.pdf. Site accessed on September 15, 2006.

Ferguson, Daryl E., Robert R. McCoy, and Matthew J. Root
2008a *Cultural resources Survey of the Oakes Avenue Improvement Project, Cle Elum, Washington*. Rain Shadow Research, Pullman, Washington.

2008b *Cultural Resources Survey of the Progress Pathway Project, Cle Elum, Washington*

Franklin, J.F. and C.T. Dyrness
1988 *Natural Vegetation of Washington and Oregon.* Oregon State University Press, Corvalis, OR.

Landreau, Christopher
2008 *An Archaeological Review and Inventory at the Proposed "Meadow Ridge" Development near Cle Elum, Kittitas County, Washington,* Reiss-Landreau Research, Yakima WA.

Lasmanis, Raymond
1991 *The Geology of Washington: Rocks and Minerals, v. 66, no. 4, p. 262-277*. Printed in modified form by the Washington State Department of Natural Resources, Division of Geology and Earth Resources. http://www.dnr.wa.gov/geology/)

Mabry, Jana J.
2000. Field Trip Guidebook to the Natural History of Kittitas County. sharepoint.snoqualmie.k12.wa.us/mshs/mabryj/Field%20trip%20Guide%20Book/mabry%20FieldTrip%20Guidebook.pdf . Site accessed on September 15, 2006.

Miller, Fennelle DeForest

1997 1997 Cultural Resource Surveys of Plum Creek Timber Company L.P.'s Proposed Timber Harvests Kittitas County, Washington.

1998 1998 Cultural Resource Surveys of Plum Creek Timber Company L.P.'s Proposed Timber Harvests Kittitas County, Washington.

2002 *Archaeological and Historic Resources Inventory of Kittitas County's Proposed White Road Improvements Project, Kittitas County, Washington.* Fennelle DeForest Miller Archaeological Consultants, Ellensburg Washington NADB 1341904

Operation Cooperation
1955 History Report, Cle Elum WA, May 1955

Operation Uplift
1955 *Spawn of Coal Dust*, A project of Operation Uplift, Community Development Program, Roslyn, WA

Ozbun, Terry, and Judith A. Chapman
2002 *Proposed US Cellular Facility Cle Elum (388317), Kittitas County, Washington* Archaeological Investigations Northwest, Portland, Oregon

Shideler, John C.
1986 *Coal Towns in the Cascades*, Melijor Publications, Spokane, WA

Tri-County Water Resource Agency.
2000 www.co.yakima.wa.us/tricnty/assessment/Section6.5-3.pdf - Supplemental Result. Site accessed on September 15, 2006.

Wilt, Julie
2001 *Letter Report: Results of a Cultural Resource Survey of the Dalle Property, Kittitas County WA.*, Applied Archaeological Research, Portland, OR

Wilt, Julia J., and Bill R. Roulette
2001 *Results of a cultural resources survey of the Bonneville Power Administration's Yakima River Side Channel Project Area, Kittitas County, Washington.* Applied Archaeological research, Portland, OR NADB 1341891

WSDOT
2006 I-90 Snoqualmie Pass East Draft EIS and Section 4(f) Evaluation. 2006. "Chapter Three Affected Environment and Consequences." www.wsdot.wa.gov/NR/rdonlyres/ 93116026-C15B-462B-BC82-8F564FF98A81/0/Chapter338317.pdf Site accessed on September 15.

Appendix A: Project Mapping

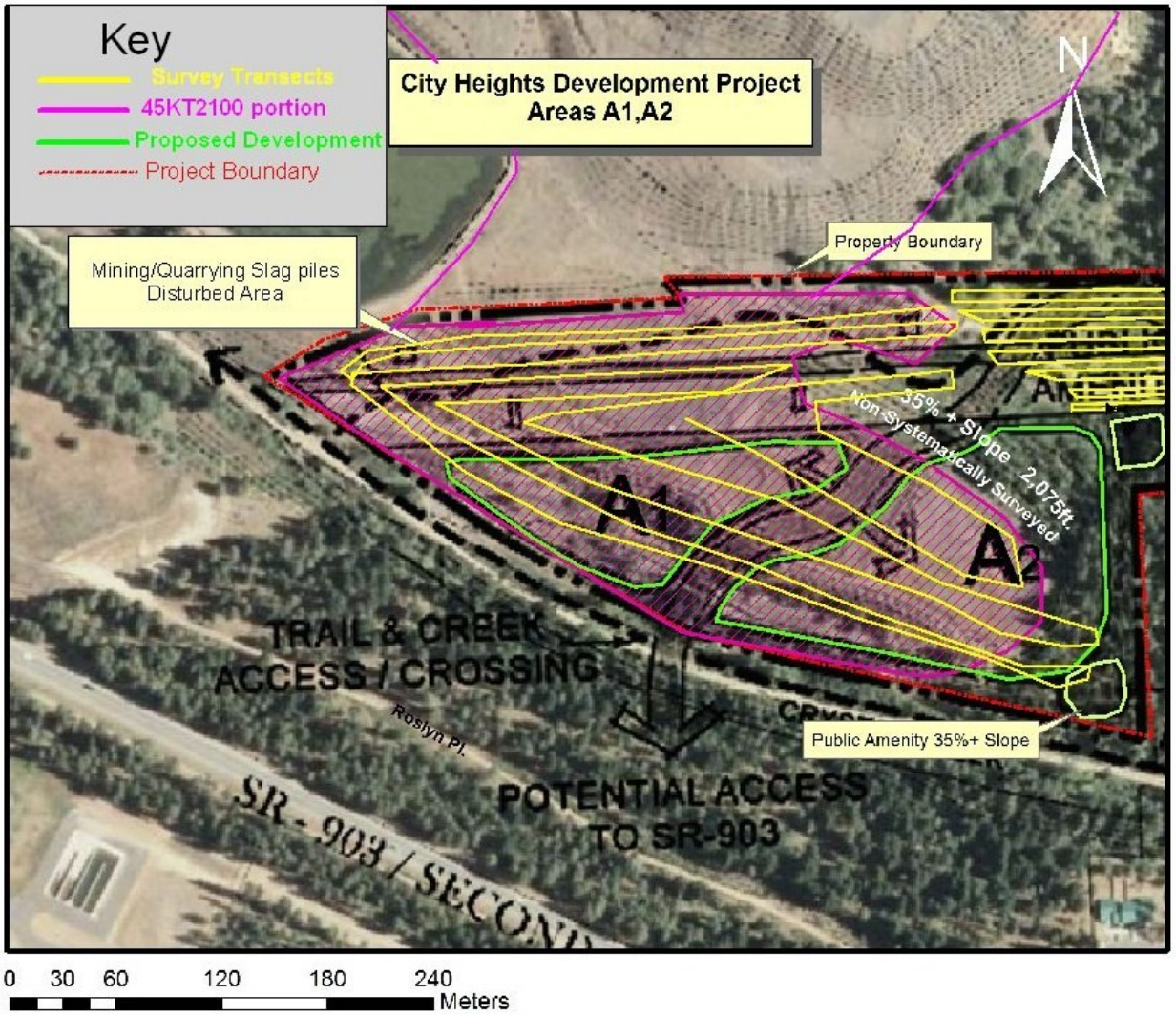


Figure 7

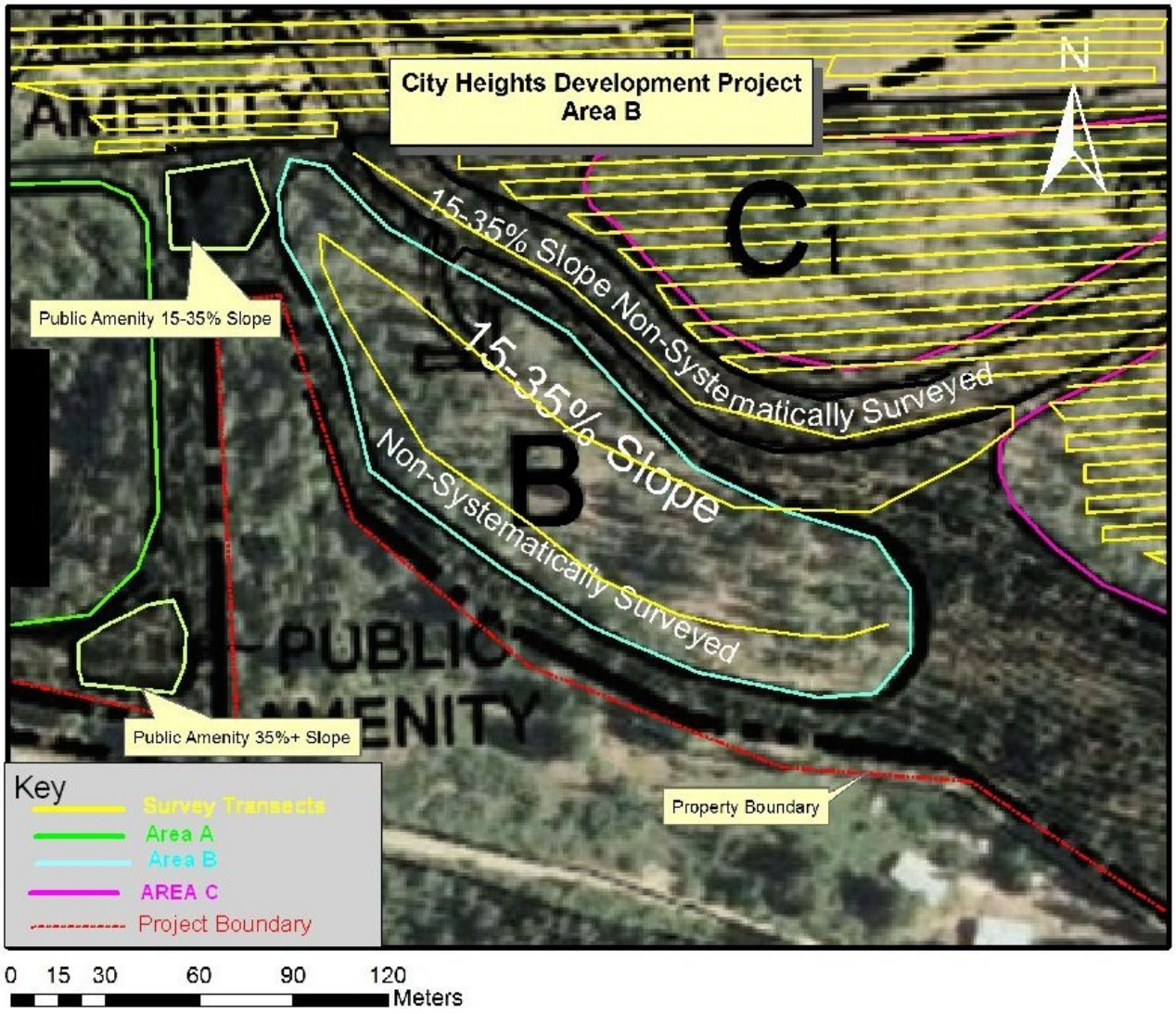

City Heights Development Project
Area B
N
C1
15-35% Slope Non-Systematically Surveyed
15-35% Slope
Non-Systematically Surveyed
B
Public Amenity 15-35% Slope
Public Amenity 35%+ Slope
Property Boundary
Key
Survey Transects
Area A
Area B
AREA C
Project Boundary
0 15 30 60 90 120
Meters

Figure 8

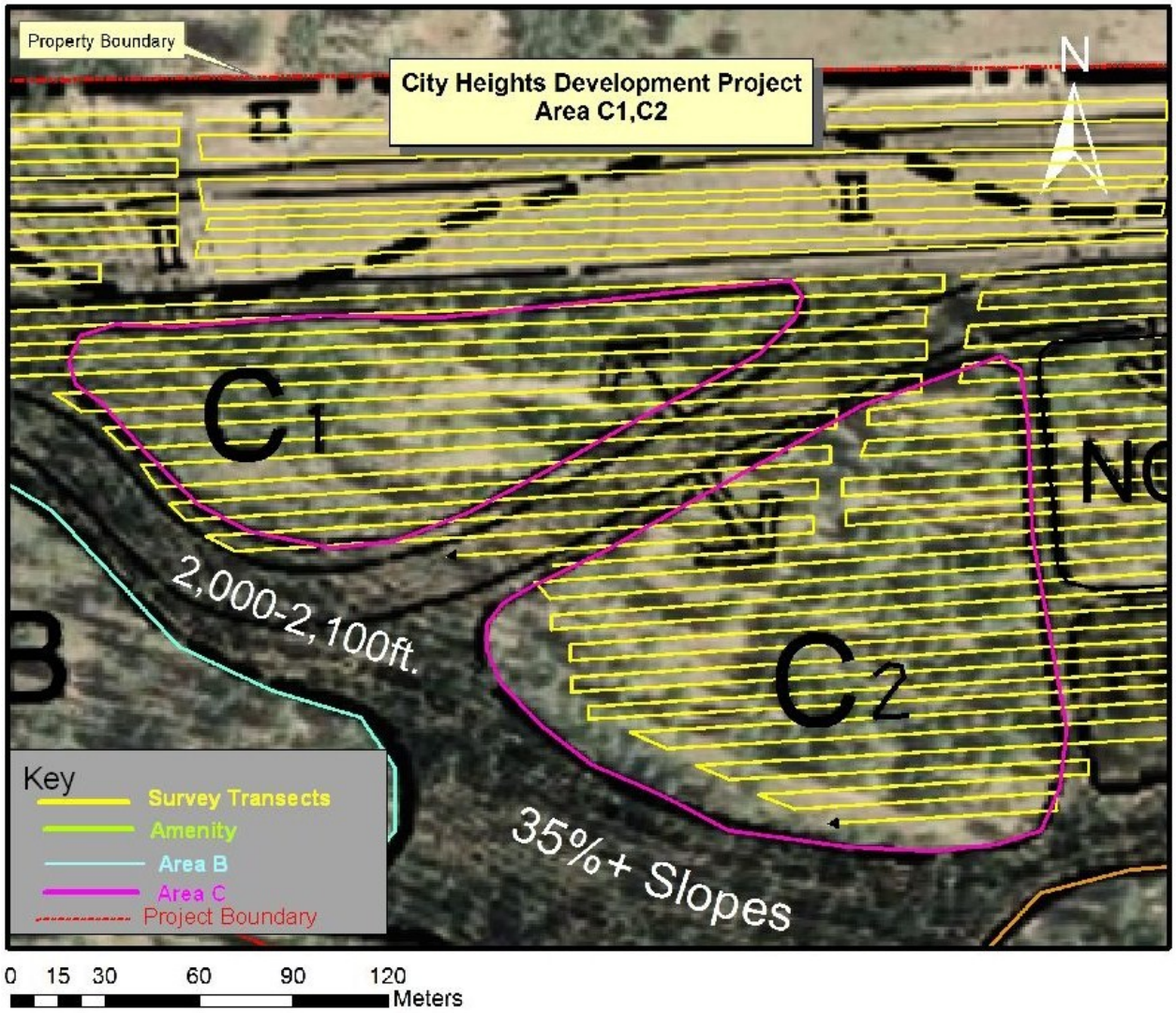

Property Boundary
City Heights Development Project
Area C1,C2
N
C1
C2
2,000-2,100ft.
35%+ Slopes
Key
Survey Transects
Amenity
Area B
Area C
Project Boundary
0 15 30 60 90 120
Meters

Figure 9

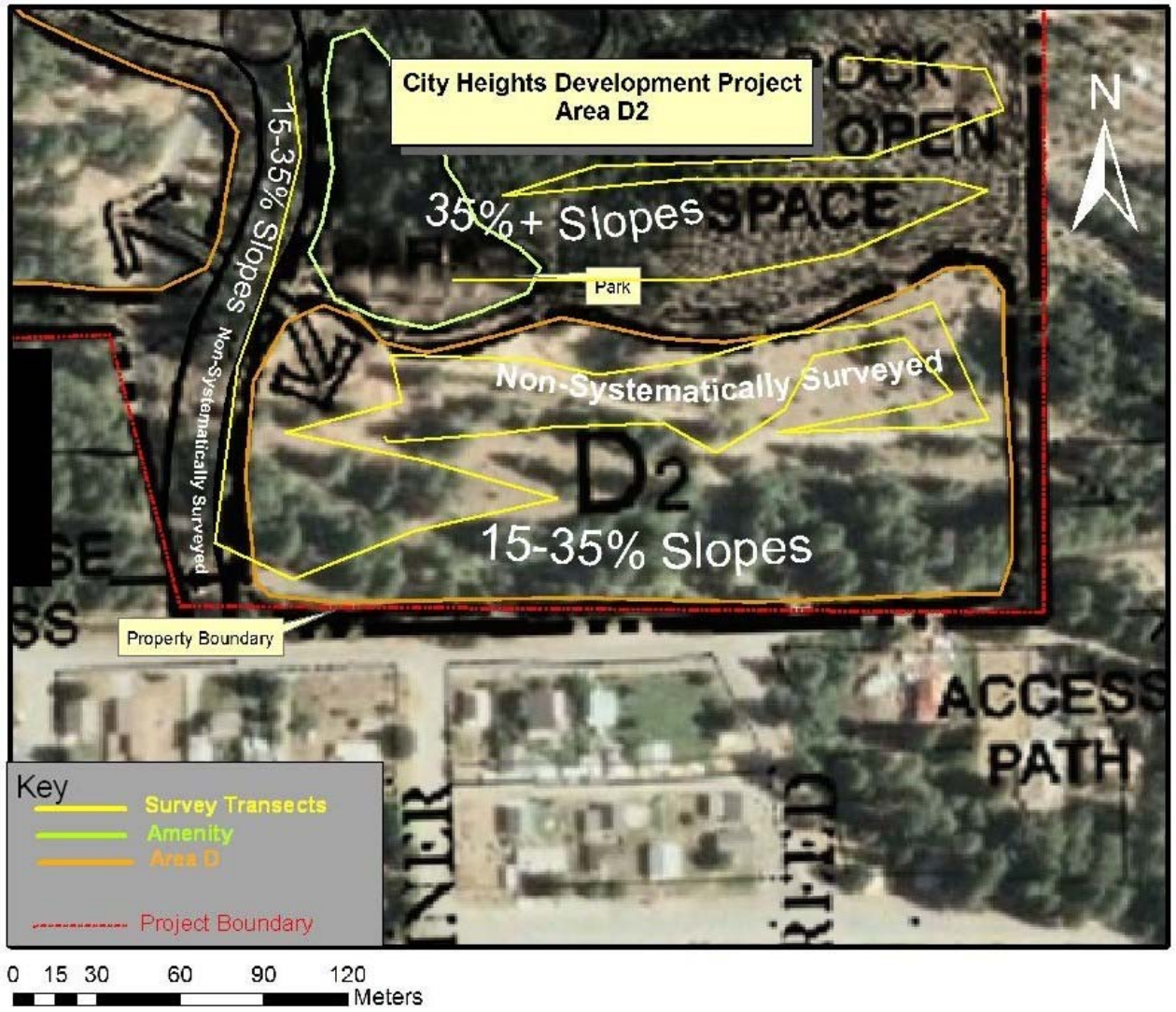

City Heights Development Project
Area D2
N
35%+ Slopes
Park
15-35% Slopes
Non-Systematically Surveyed
Non-Systematically Surveyed
D2
15-35% Slopes
Property Boundary
ACCESS
PATH
Key
Survey Transects
Amenity
Area D
Project Boundary
0 15 30 60 90 120
Meters

Figure 10

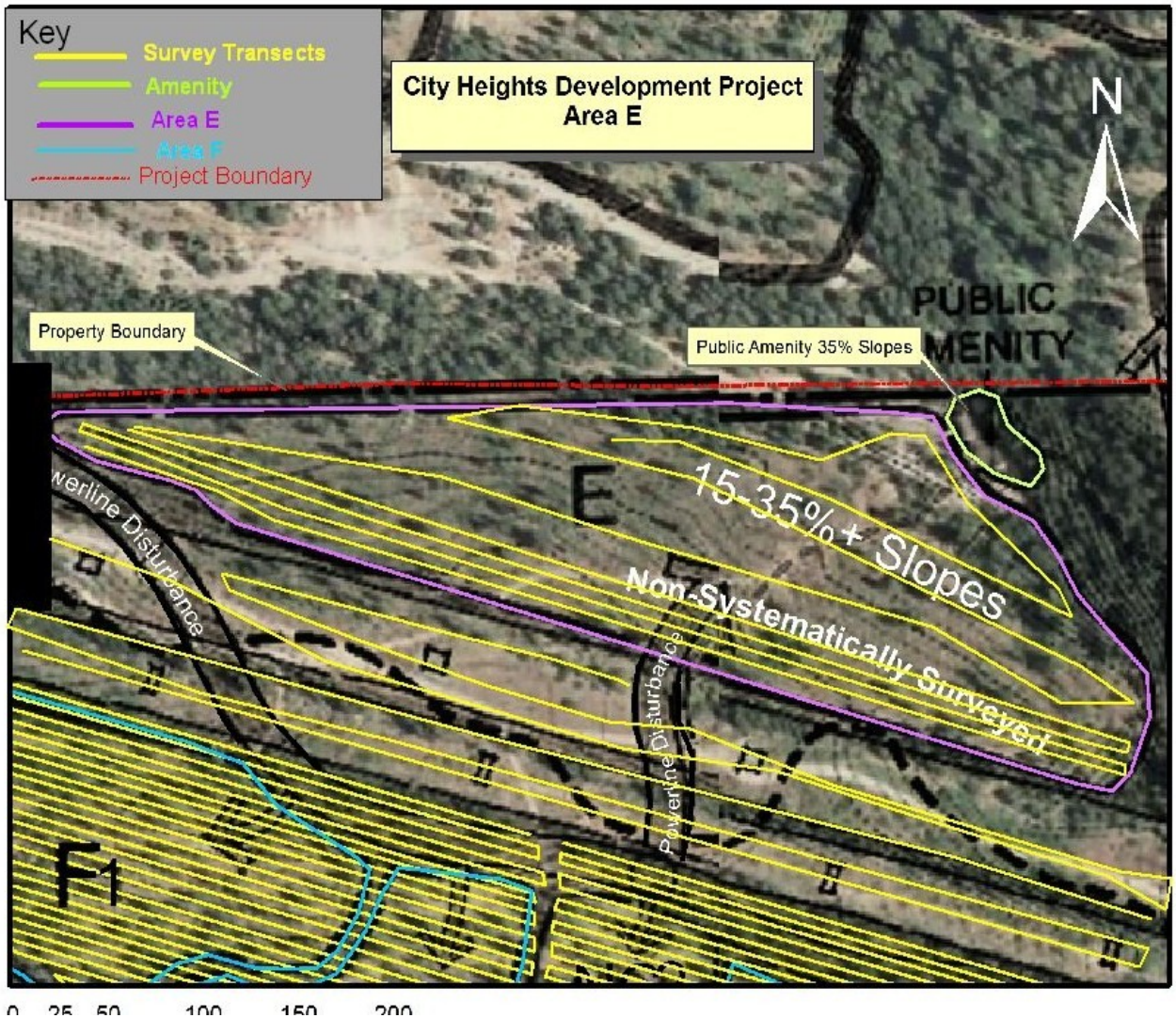

Key
Survey Transects
Amenity
Area E
Area F
Project Boundary
City Heights Development Project
Area E
N
PUBLIC
MENITY
Property Boundary
Public Amenity 35% Slopes
E
15-35%+ Slopes
Non-Systematically Surveyed
werline Disturbance
Powerline Disturbance
F1
0 25 50 100 150 200

Figure 11

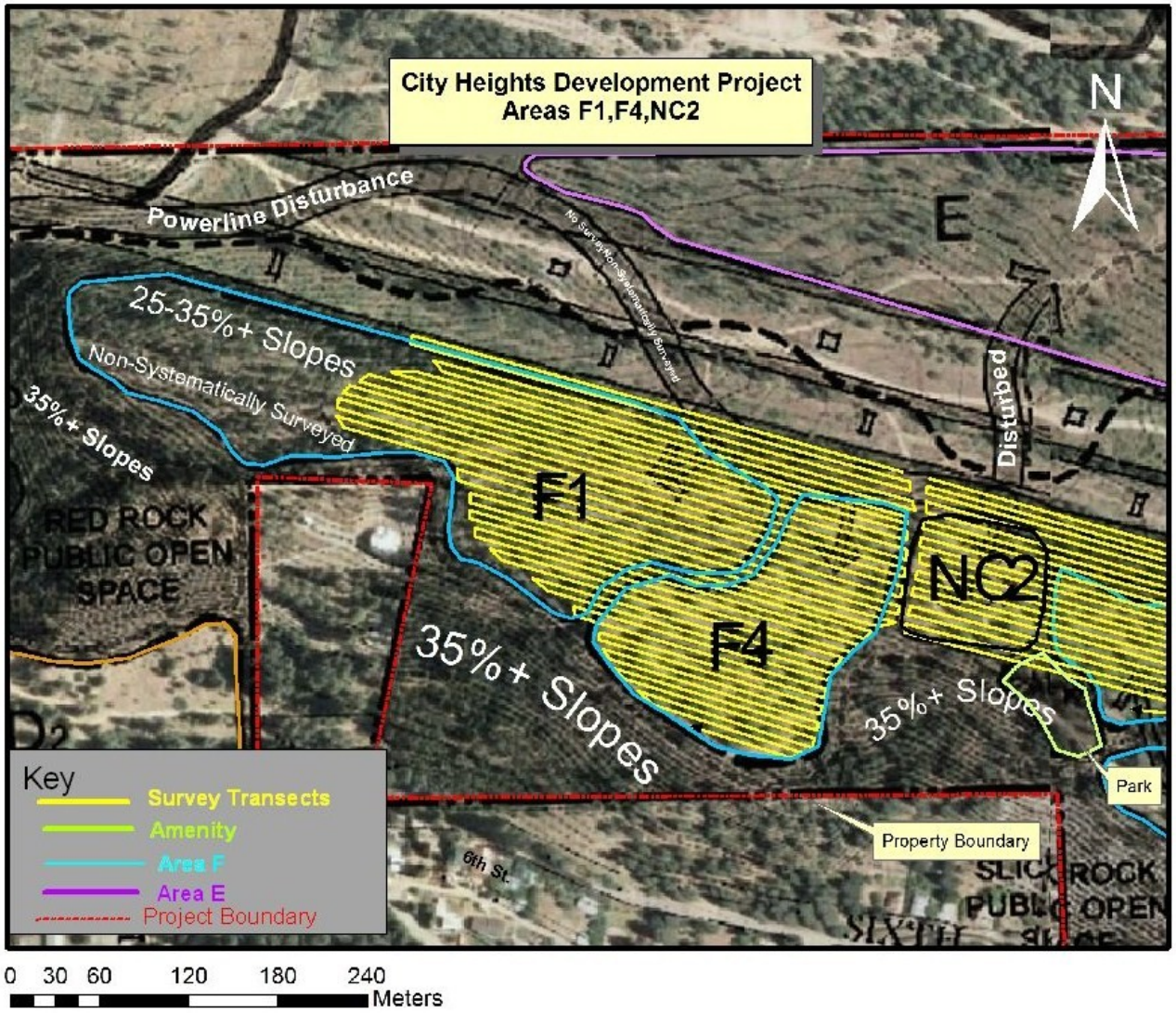

City Heights Development Project
Areas F1,F4,NC2
N
Powerline Disturbance
E
25-35%+ Slopes
Non-Systematically Surveyed
35%+ Slopes
Disturbed
F1
F4
NC2
RED ROCK
PUBLIC OPEN
SPACE
35%+ Slopes
35%+ Slopes
Park
Property Boundary
6th St.
Key
Survey Transects
Amenity
Area F
Area E
Project Boundary
0 30 60 120 180 240
Meters

Figure 12

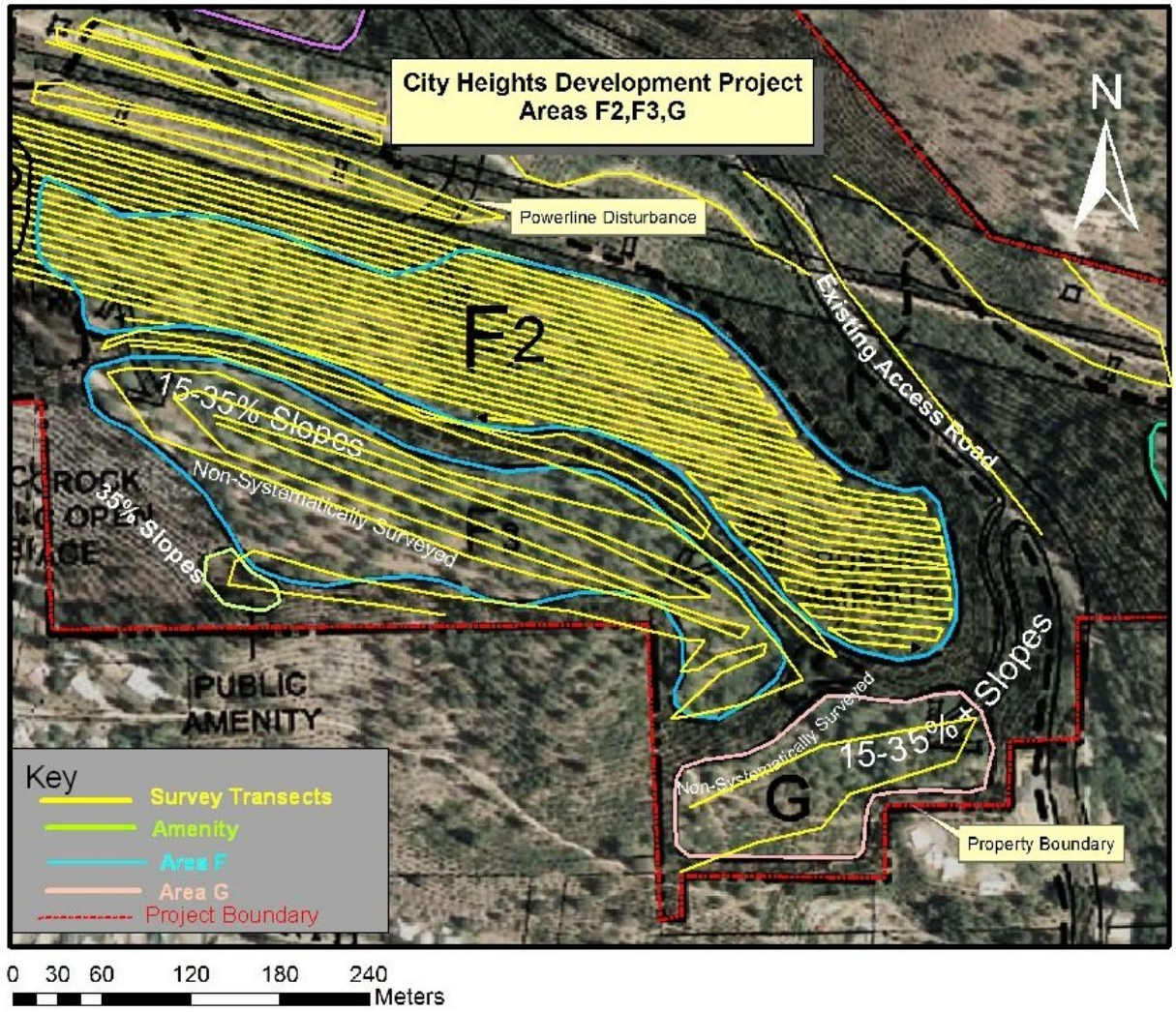

City Heights Development Project
Areas F2,F3,G
N
Powerline Disturbance
Existing Access Road
F2
15-35% Slopes
Non-Systematically Surveyed
35% Slopes
ROCK
OPEN
PUBLIC
AMENITY
15-35% Slopes
Non-Systematically Surveyed
G
Property Boundary
Key
Survey Transects
Amenity
Area F
Area G
Project Boundary
0 30 60 120 180 240
Meters

Figure 13

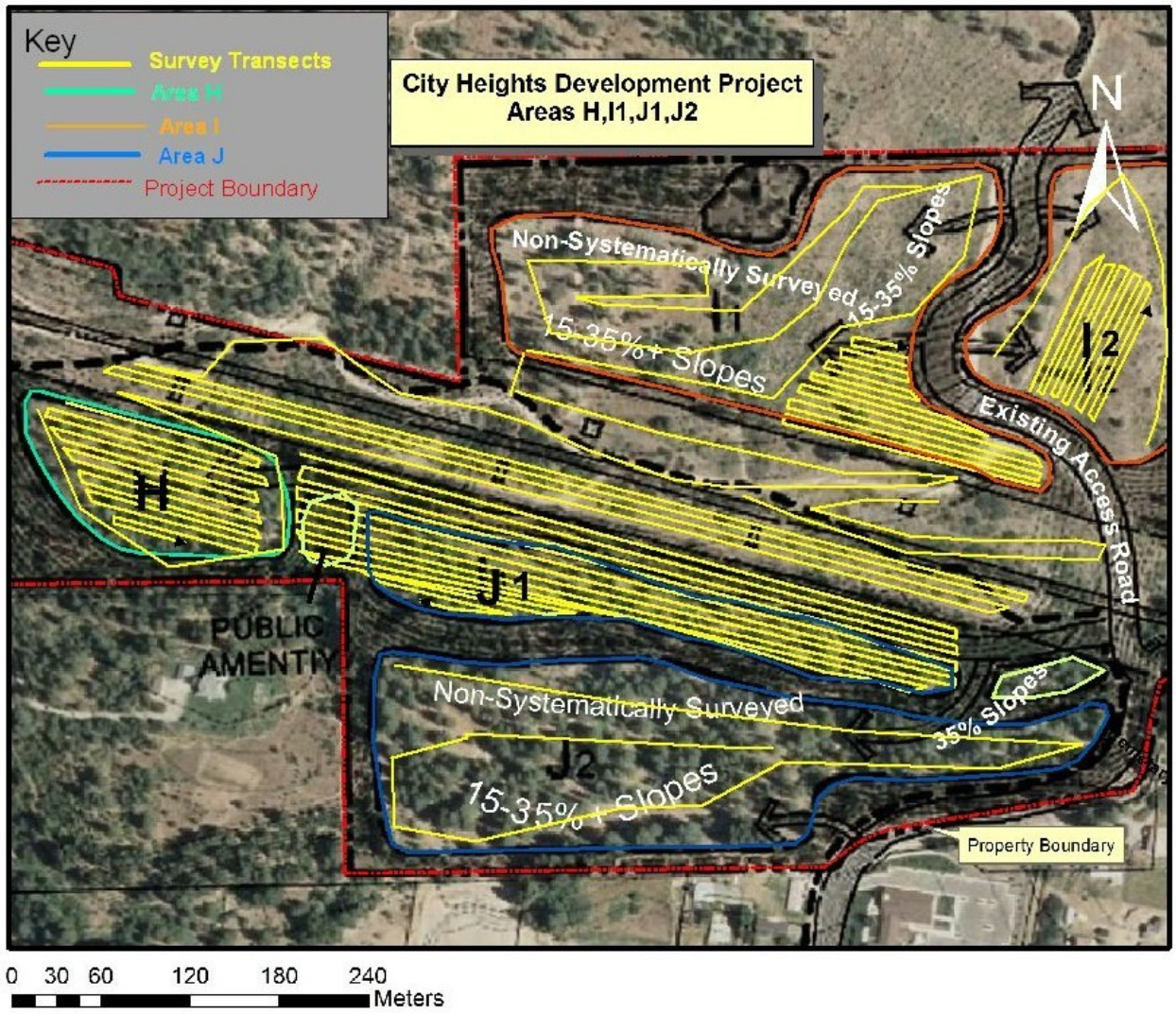

Key
Survey Transects
Area H
Area I
Area J
Project Boundary
City Heights Development Project
Areas H,I1,J1,J2
N
Non-Systematically Surveyed 15-35% Slopes
15-35%+ Slopes
I2
Existing Access Road
H
J1
PUBLIC AMENITY
Non-Systematically Surveyed
35% Slopes
J2
15-35%+ Slopes
Property Boundary
0 30 60 120 180 240
Meters

Figure 14

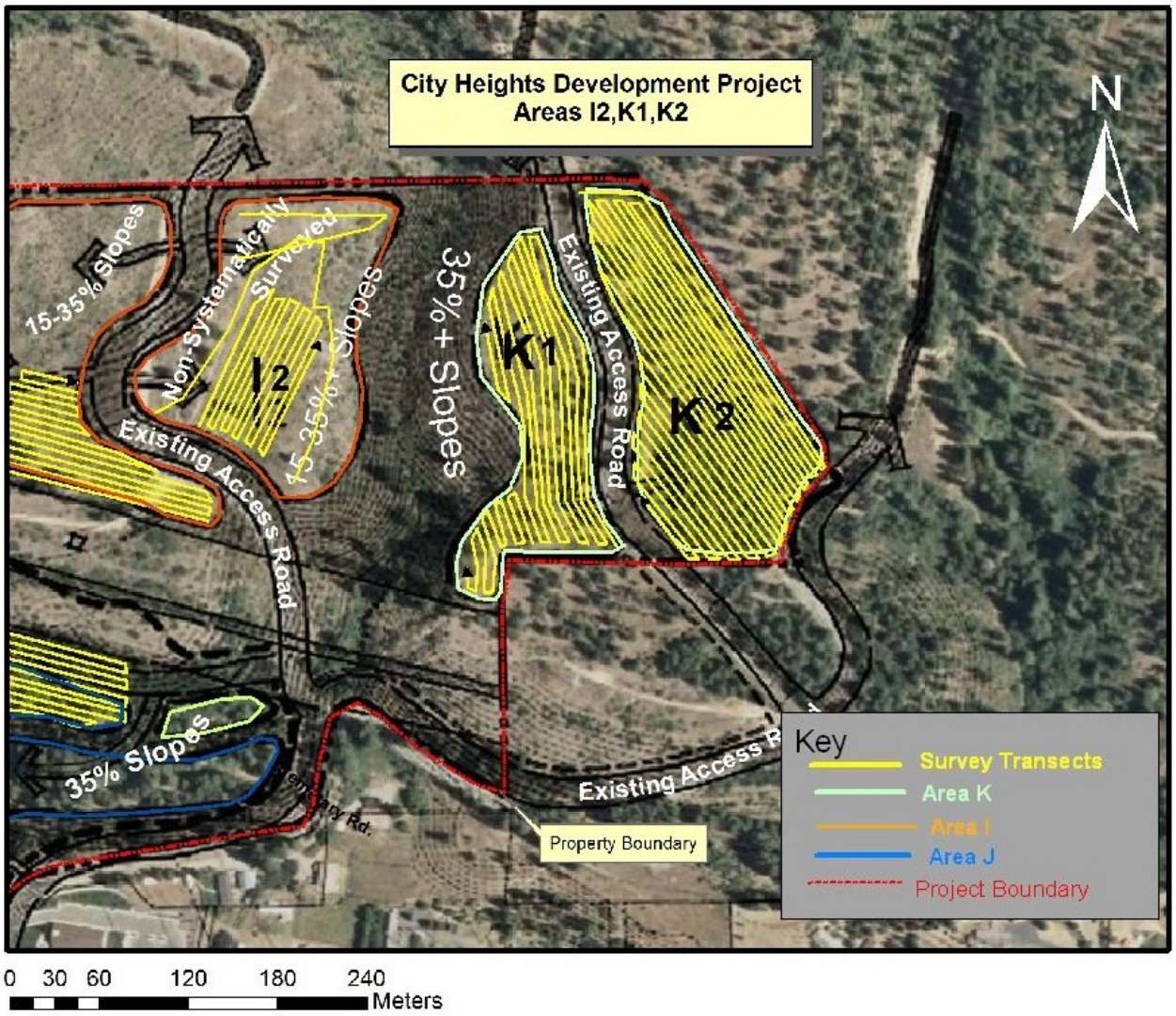

City Heights Development Project
Areas I2,K1,K2
N
15-35% Slopes
Non-Systematically Surveyed
I2
>35% Slopes
35%+ Slopes
K1
Existing Access Road
K2
Existing Access Road
35% Slopes
Existing Access R
Property Boundary
Key
Survey Transects
Area K
Area I
Area J
Project Boundary
0 30 60 120 180 240
Meters

Figure 15

Appendix B: Photography

Figure 16: Facing East in J-1

Figure 17: Facing north along powerline near A2

Figure 18: Shovel test probe 1

Figure 19: Shovel test probe 2

Figure 20: timber harvest in area C

Figure 21: Area C mixed trash dump

Figure 22: Area C mixed trash dump

Figure 23: Area F2

Figure 24: View of 45KT1260 slag feature

Figure 25: Area F exposed sandstone

Figure 26: Area J: Powerline

Figure 27: Area I adjacent to powerline

Appendix C Site Forms

STATE OF WASHINGTON
ARCHAEOLOGICAL SITE INVENTORY FORM

Smithsonian Number:

***County:** Kittitas

***Date:** 06-06-09 ***Compiler:** C. Landreau

Location Information Restrictions *(Yes/No/Unknown)***:** Yes

SITE DESIGNATION

Site Name: NWI Coal Company Mine No. 5 Tailing and Slag features

Field/ Temporary ID:

***Site Type :** Historic Mining Property

SITE LOCATION

***USGS Quad Map Name:** Cle Elum, WA

***Legal Description: T**20 **R** 15 **E/W:** E **Section(s):** 21,22,28,and27

Quarter Section(s):

***UTM: Zone** 10 **Easting** 654467.84 **Northing** 5229786.52

Latitude: **Longitude:** **Elevation (ft/m):** 1990

Other Maps: **Type:**

Scale: **Source:**

Drainage, Major: Yakima River **Drainage, Minor:** Unnamed Draw **River Mile:**

Aspect: variable **Slope:** 2-30%

Location Description** *(General to Specific):** This site is located in the eastern Foothills of the Cascade mountains, along the Cle Elum Ridge, just West and North of the City of Cle Elum

Approach *(For Relocation Purposes)***:** To get to this site from Cle Elum WA, Follow 2nd avenue

Mandatory Information for Official Smithsonian Number designation. *Revised 10/2008*

west as it becomes SR903. Drive to first crossing of High tension lines over roadway. enter gravel access road, follow the access road 80 meters to drop-off. Park. Slag piles are visible North

SITE DESCRIPTION

***Narrative Description:** This site is really just some of the tailing deposits from the No. 5 mine. It is east of 45KT2100, which show several other types of features from the mine. The mine entrance and remnant features are not at this locale, but are located 1/2 mile west.

The Northwestern Improvement Company (NWI) Mine No. 5. was originally created in 1898 as part of a network to provide coal. The mine was the deepest of all of the mines in the area, and closed in 1948 (Operation Uplift 1955:186)

There is evidence of some quarrying or strip mining in the area of the No. 5 Mine. This site features remnant tailing deposits.

Site Type** *(Refer to the DAHP Survey and Inventory Guidelines Page 19):** Historic Mining Feature

***Site Dimensions**

***Length:** .6 miles M ***Direction: n/s** x ***Width:** 2100 ft M ***Direction:** e/w

***Method of Horizontal Measurement:**

***Depth:** 1200 feet M * **Method of Vertical Measurement:** Historic Mining records

Vegetation** *(On Site):** Mixed Conifers

Local: **Regional:**

Landforms *(On Site)***:** small drainage **Local:** hillslope

Water Resources *(Type)***:** Yakima River **Distance:** 1 mile **Permanence:** permanent

CULTURAL MATERIALS AND FEATURES

***Narrative Description:** Brick and slag from demolished strictures, concrete blocks, adits accessways etc.

***Method of Collection(s):** N/A

Location of Artifacts** *(Temporary/Permanent):** N/A

SITE AGE

***Component:** ***Dates:** Constructed in 1898, abandoned in 1948 ***Dating Method:** Historic Records Operation Uplift 1955:186

***Phase:** **Basis for Phase Designation:**

SITE RECORDERS

Observed by: Chris Landreau **Address:** PO Box 2215, Yakima, WA 98907

***Date Recorded:** 06-05-2009

Recorded by** *(Professional Archaeologist):** Chris Landreau

***Affiliation:** Reiss-Landreau Research ***Affiliation Phone Number:** (509)952-5130

***Affiliation Address:** PO Box 2215, Yakima, WA 98907 ***Affiliation E-mail:** Chrislandreau@charter.net

Date Revisited: **Revisited By:**

SITE HISTORY

Previous Work *(Done on Archaeological Site)***:** None

LAND OWNERSHIP

***Owner:** R and R Heights Land Co Inc

***Address:** PO Box 687, Roslyn, WA

***Tax Lot/ Parcel No:** 13509

RESEARCH REFERENCES

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

Operation Cooperation

1955 History Report, Cle Elum WA, May 1955

Operation Uplift

1955 Spawn of Coal Dust, A project of Operation Uplift, Community Development Program, Roslyn, WA

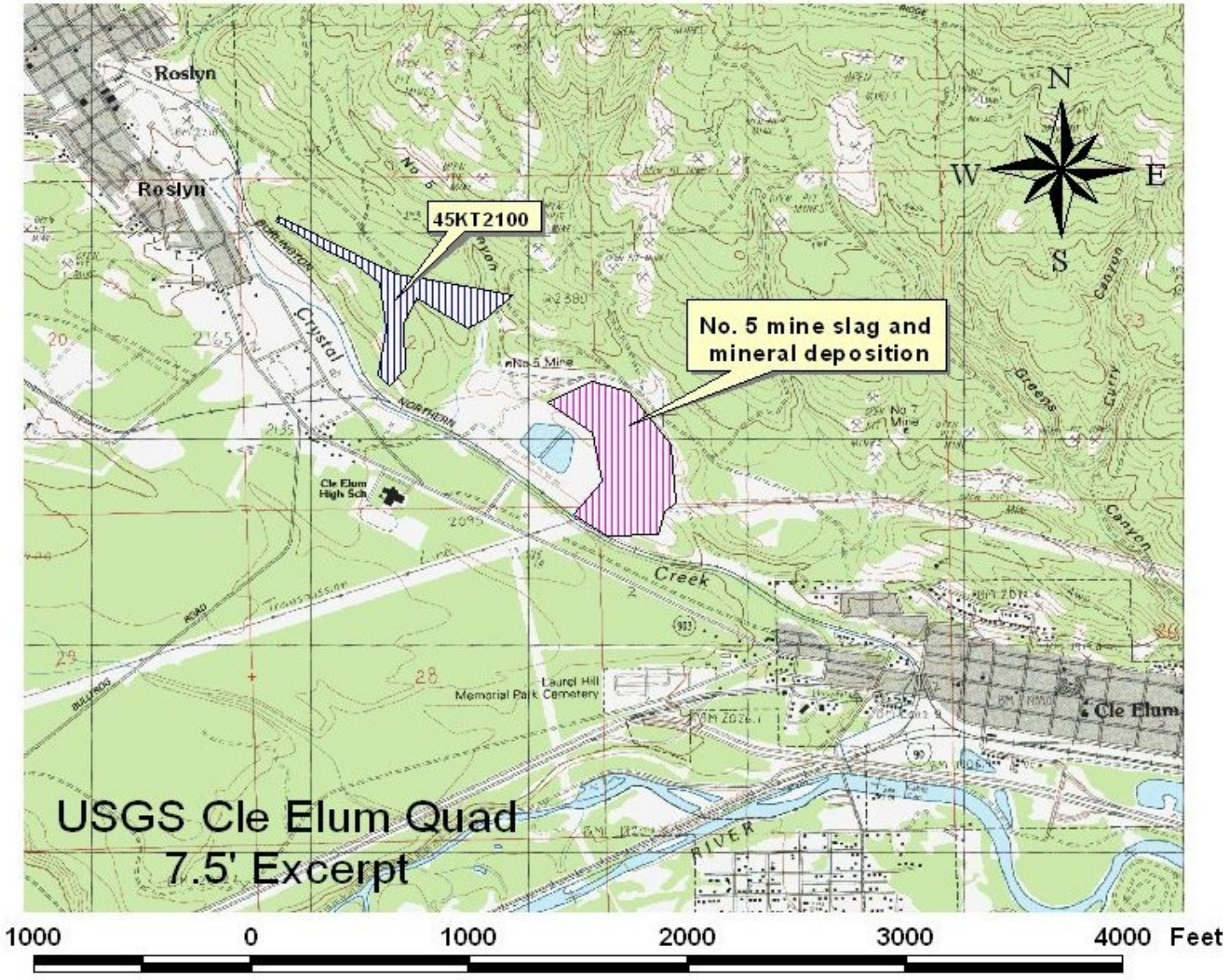
USGS MAP

*__Quad Name:__ Cle Elum

__*Series:__ 7.5 Minute

__*Date:__ 1989

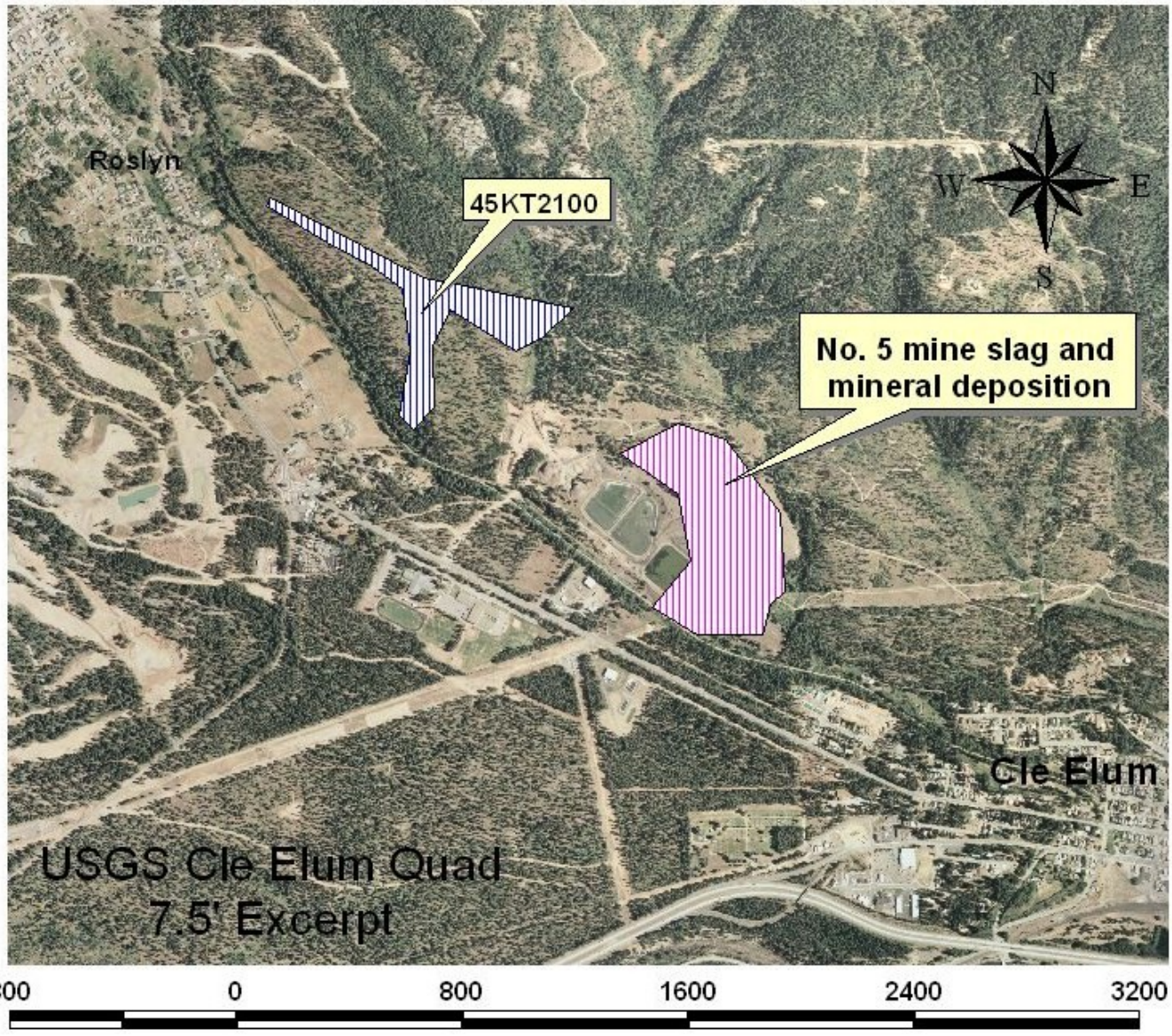
Slag feature from No.5 Mine



SKETCH MAP

__*Sketch Map Description:__ Ronald Mine Area

Slag feature from No.5 Mine



PHOTOGRAPH(S)

***Photograph Description(s):**

Figure 1: View toward Slag dump area

Figure 2: Slag Deposition

Figure 3: Mining disturbance and physiographic undulations from the mine.

CONTINUATION/ ADDENDUM SHEET

Label all additional pages by corresponding headings.

(e.g. Site Description, Site History, Research References)