

CB RAUS

SIT 5.11

EMERGENCY ACTIONS - EMERGENCY ACTION REPORT

REMEDIAL ACTION UNIT 3

**CAMP BONNEVILLE
VANCOUVER, WASHINGTON**

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Prepared for:

Washington Department of Ecology

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LIST OF ACRONYMS/ABBREVIATIONS

APP	Accident Prevention Plan
BCRRT	Bonneville Conservation Restoration and Renewal Team, LLC
BRAC	Base Realignment and Closure
CITA	Central Impact Target Area
DDESB	Department of Defense Explosive Safety Board
DoD	Department of Defense
EA	Emergency Actions
EAR	Emergency Action Report
EAWP	Emergency Action Work Plan
ESCA	Environmental Services Cooperative Agreement
FTP	File Transfer Protocol
GDL	Grid Data Log
GPS	Global Positioning System
HASP	Health and Safety Plan
LLC	Limited Liability Company
MD	munitions debris
MEC	munitions and explosives of concern
MSD	minimum separation distance
MTCA	Washington State Model Toxics Control Act
OB/OD	Open Burn/Open Detonation
OSHA	Occupational Safety and Health Administration
lbs	pounds
PPCD	Prospective Purchaser Consent Decree
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QC	Quality Control
RAU	Remedial Action Unit
SUXOS	Senior Unexploded Ordnance Supervisor
TCRA	Time Critical Removal Action
USATCES	U.S. Army Technical Center for Explosive Safety
UTM	Universal Transverse Mercator
UXO	unexploded ordnance
UXOQCS	Unexploded Ordnance Quality Control Supervisor
WDNR	Washington State Department of Natural Resources
WDOE	Washington State Department of Ecology

1.0 INTRODUCTION

1.1 General Introduction

This Emergency Action Report (EAR) has been prepared by MKM Engineers, Inc. (MKM) and Michael Baker Jr., Inc. (Baker) on behalf of the Bonneville Conservation Restoration and Renewal Team, LLC (BCRRT) to meet the requirements of Prospective Purchaser Consent Decree (PPCD) issued on (date). This decree calls for remediation of the former Camp Bonneville Military Reservation [the Property, as defined in Paragraph 12(G) of the PPCD], located in Clark County, Washington (**Figure 1-1**). This document meets the requirements in Department of Defense 6055.9-STD for reporting of completed actions.

These emergency actions, as defined in Section X-C, Paragraph 90 of the PPCD, included brush clearance, munitions of explosive concern (MEC) surface clearance, fence replacement or repair where needed, and installation of new warning signs for the Property perimeter and the Central Impact Target Area (CITA) perimeter. A separate submittal detailing fence and signage repairs and replacement will be prepared and submitted to Washington Department of Ecology (WDOE). **Figure 1-2** shows the Property perimeter and the CITA in Remedial Action Unit (RAU) 3. These emergency actions were implemented to restrict access to the Property during future investigation and cleanup of the Property and to reduce the threat to human health and safety associated with military munitions and other contamination located within the Property.

Certain emergency actions, as required by the PPCD, have not been fully completed at this time. Specific areas (survey grids) identified in the PPCD could not be MEC surface cleared because of their proximity to residential housing (based upon the minimum separation distance (MSD) required for MEC surface clearance), seasonal flooding, or both. These grids will be completed at a later date to be determined by BCRRT in consultation with WDOE and Clark County. An EAR addendum will be submitted for these areas once clearance has been completed to provide closure for these emergency actions.

1.1.1 Status of this Emergency Action

MKM and Baker conducted the emergency actions following the Emergency Action Work Plan (EAWP) and its addendum (BCRRT, 2006 and 2007). Activities were conducted in accordance with the Time Critical Removal Action Explosive Safety Submission (TCRA ESS), which details the investigation, handling, or demolition of MEC (MKM Engineers, Inc., 2006). While the TCRA ESS has not yet been approved by the Department of Defense (DoD) Explosive Safety Board (DDESB), it has received approval from the US Army Technical Center for Explosive Safety (USATCES).

This report satisfies the requirements set forth in the PPCD, Section X-E, Paragraphs 107, and 110.

- Paragraph 107 requires that an EAR be submitted to document emergency actions in an RAU. The EAR will include the following:
 - A summary of the emergency actions completed;

- The results of these emergency actions; and
- Descriptions of each item of MEC (if any) found during the emergency actions, including the following particulars [see Paragraph 107(C)]:
 - Identification of the MEC item;
 - Description of the fusing condition of that MEC item; and
 - The location and depth at which the MEC item was found.
- Paragraph 113 requires that a Cultural and Historical Resources Protection Report be part of any EAR.

No MEC or cultural or historical resources were identified during the emergency actions of RAU 3. Therefore, the requirements of Paragraphs 107(C) and 113 are satisfied without further reporting.

These emergency actions are considered complete with the exception of those grids discussed in **Section 3.1.4** to be done at a later date. An EAR Addendum will be submitted covering emergency actions in those grids as soon as feasible.

1.1.2 Emergency Actions Performed

The emergency actions performed for the Property perimeter and CITA perimeter consisted of the following work items:

- Brush clearance out to 10 feet from the Property perimeter and CITA boundary (anomaly avoidance was initially conducted as outlined in Section 1.23.1 of the EAWP prior to approval of the TCRA ESS);
- Surface clearance for MEC following procedures outlined in Section 2.0 of the EAWP;
- Repair/replacement of perimeter fencing as outlined in Section 2.4 of the EAWP; and
- Installation of new “No Trespassing” signs at 50-foot intervals along the perimeter fencing as outlined in Section 2.5 of the EAWP.

1.1.3 Contribution of These Emergency Actions to Meeting Overall Cleanup Goals

These emergency actions contribute to the project cleanup goals set forth in the PPCD as follows:

- The brush and MEC surface clearance actions were used to increase the BCRRT’s understanding of the presence of MEC across the Property and to aid in reducing the risk to human health and safety associated with MEC on the Property.

- Control of access to the Property is a critical institutional control as defined in the PPCD. The repair/replacement of perimeter and CITA fencing and the upgrade of signage will aid in the restriction of public access to the site and provide public notice of potential hazards.

All of these activities are protective of human health and safety and further the objectives of the PPCD.

1.2 General Statement of Work under these Emergency Actions

As suggested above, work to date has focused on brush and MEC surface clearance, as well as fence replacement/repair and appropriate signage replacement at the Property perimeter and CITA perimeter. Details of the fence and signage repairs and replacement will be prepared and submitted to WDOE as a separate EAR.

1.2.1 Brush and MEC Surface Clearance

Following the Base Realignment and Closure (BRAC) of Camp Bonneville in 1995, vegetation management was essentially halted within the Property. As a result, vegetation had overgrown most of the roads and trails bordering the Property perimeter and boundary of the CITA. To safely access and repair/replace the damaged perimeter and CITA fences and to replace the signage, extensive brush clearance was required.

Additionally, to reduce the threat to human health and safety associated with military munitions which may be located within the Property, MEC surface clearance and construction support MEC avoidance activities were conducted with the brush clearance area actions along the Property perimeter and along the boundary of the CITA perimeter upon USATCES approval of the TCRA ESS.

1.3 Legal and Regulatory Basis

The legal and regulatory basis for the emergency actions described in this EAR are as follows:

1.3.1 Prospective Purchaser Consent Decree

The emergency actions conducted for RAU 3 were defined in Section X-C, Paragraph 90 of the PPCD. Subparagraph (A) of Paragraph 90 defines the work to be done at the Property perimeter. Subparagraph (B) defines the work to be done at the CITA perimeter. These subparagraphs require the following emergency actions:

- Conduct brush clearance within 10 feet of the interior of each fence line;
- Conduct MEC surface clearance within these 10-foot zones;
- Apply step-out procedures if MEC or related forensic evidence is encountered during the brush and MEC surface clearance activities;
- Repair and/or replace the fencing as needed; and

- Install new warning signs at 50-foot intervals along both fences

This report is intended to satisfy the requirements set forth in the PPCD, Section X-E, Paragraphs 107 and 110, for the reporting of emergency actions. Paragraph 107 requires that an EAR be submitted for documenting any emergency actions in a RAU to include information on any MEC findings during any emergency actions. Paragraph 113 requires a Cultural and Historical Resources Protection Report be submitted with any EAR.

1.3.2 Washington State Model Toxic Control Act

The actions detailed in this EAR comply with the relevant requirements of the Washington State Model Toxics Control Act (MTCA).

1.4 Documents Incorporated by Reference

1.4.1 Site-Wide Health and Safety Plan

A site-wide Accident Prevention Plan (APP), with an attached Health and Safety Plan (HASP) was developed for the Camp Bonneville project to cover all remedial activities required to achieve site closure as defined in the PPCD (Baker, 2006). The APP/HASP was developed in compliance with WDOE and Occupational Safety and Health Administration (OSHA) requirements and submitted under separate cover to WDOE for review. All activities were performed in accordance with the APP/HASP.

1.4.2 Cultural and Historical Resources Protection Plan

As required by the PPCD (Section X-E, Paragraph 112), BCRRT prepared a Cultural and Historical Resources Protection Plan (Baker, 2006). This Plan was in effect during these emergency actions. This plan includes information and guidance to prepare emergency action workers in identifying and protecting any cultural and historical resources which may have been encountered during implementation of emergency action activities.

To support and supplement the Cultural and Historical Resources Protection Plan, representatives of the Cowlitz tribe and associated archaeological experts delivered training to site workers before the start of emergency action field work. This training addressed the history of Native American cultures at the Property and provided guidance relating to identification and protection of any cultural or historical artifacts which might have been encountered during these emergency actions.

It should be noted that no cultural or historical artifacts with encountered during these emergency actions.

1.5 Summary of Site History and Status

The Property was established by the U.S. Army in 1909 as a drill field and rifle range for Vancouver Barracks. In 1912, an appropriation was made to expand facilities to include target ranges and a road leading to the installation. There are two cantonment areas in Camp Bonneville: Camp Bonneville and Camp Killpack. These cantonments, built during the 1920s and 1930s, include 49 buildings. The Property consists of 3,020 acres formerly owned by the Army and conveyed by deed transfer to Clark County and then to the BCRRT on October 4, 2006 (see **Figure 1-1**). The Army leased an additional 820 acres from the Washington Department of Natural Resources (WDNR). The WDNR leased property will be remediated in accordance with the PPCD and an Environmental Services Cooperative Agreement (ESCA) dated July 28, 2006. The Army's lease term is ending and will be replaced by a lease between WDNR and Clark County.

Camp Bonneville's mission was to train active, reserve, and national guard units of the Army, Navy, Marine Corps, and Coast Guard. Training exercises generally included weapons training with small arms ammunition, assault weapons, and field and air defense artillery. Between 1909 and 1995, live and practice munitions including artillery and mortar rounds, shoulder-fired rockets, land mines (practice only), grenades, and small-arms ammunition were stored and used on the Property. In the 1980s, the Property was also used for non-military purposes including religious retreats, picnicking, camping, educational purposes, and pistol training for the Washington State Police. Records indicate that military munitions were disposed of by Open Burn/Open Detonation (OB/OD). The Property was closed in 1995 under the authority of the BRAC laws. Since 1995, the Property has been maintained in caretaker status.

On October 4, 2006, the deed for the Property was transferred from the Army to Clark County and immediately onto BCRRT as part of a conservation conveyance. In accordance with the PPCD and ESCA, BCRRT will remain the interim owner until regulatory closure is achieved for the remedial action units associated with the Property.

The Property includes the following site improvements (buildings, facilities, utilities, and ranges):

Camp Bonneville

- **Cantonment Buildings:** 1815, 1826, 1828, 1833, 1837, 1847, 1848, 1857, 1864, 1867, 1911, 1920, 1922, 1923, 1930, 1932, 1934, 1940, 1942, 1980, and 1997.
- **Facilities:** 1981-flagpole, 1992-water well pump house, 1995-sewage lift station, 1999-sewage lagoons, 2663-water reservoir, 2950-ammunition magazine, 2951-ammunition magazine, and 2953-ammunition magazine.
- **Utilities:** electric, gas, sanitary sewers, and water.

Camp Killpack Cantonment

- **Buildings:** 4125, 4126, 4155, 4314, 4316, 4325, 4327, 4337, 4345, 4348, 4356, 4364, 4366, 4368, 4377, 4378, 4387, 4389, 4398, 4475, 4475A, 4475B, 4476, 4476A, and 4483.
- **Facilities:** 4522 – water well pump house and 4532 – water reservoir.



- **Ranges:** U001A-observation tower, U001B-covered training area, U001C-bleachers, U002A-observation tower, U002B-observation tower, U003B-covered training area, U004A-observation tower, U004B-covered training area, U004C-bleachers, U005A-observation tower, U006A-observation tower, U006B-observatoin tower, U007A-observation tower, U008A-observation tower, U008B-covered training area, U010A-observation tower, and U010B- covered training area.

Other

An underground natural gas pipeline (owned by the Northwest Pipeline) traverses the southwestern corner of the Property. The right of way was issued by Bureau of Land Management in 1992 for a 30-year term. The Army transferred all other property, inclusive of all building, facilities, and utilities, in “as-is” condition.

**2.0 Emergency Action
Objectives**

2.0 EMERGENCY ACTION OBJECTIVES

2.1 MEC Investigation Objectives

The MEC investigation objectives of the emergency actions were intended to aid in the cleanup of the Property and to reduce the threat to human health and safety associated with military munitions and other contamination located within the Property.

2.1.1 Anomaly Avoidance and Brush Clearance Objectives

The objectives of the anomaly avoidance and brush clearance tasks were to remove vegetation from a 10-foot buffer zone along the Property perimeter and the CITA perimeter fence lines. By removing the brush, fencing repairs and sign replacement activities could be accomplished with unexploded ordnance (UXO) avoidance support. Anomaly avoidance/brush clearance activities were performed before the approval of the TCRA ESS (MKM Engineers, Inc., 2006)

2.1.2 MEC Surface Clearance Objective

The objective of the MEC surface clearance task was to locate and remove any surface MEC items within the 10-foot buffer zone along the Property perimeter and the CITA perimeter for the purpose of reducing the threat to human health and safety associated with military munitions and other contamination located within the Property. The emergency action surface clearance activities also provided information to the BCRRT regarding the location and identification of MEC and munitions debris (MD) located within the emergency action areas.

3.0 TASK PERFORMANCE

3.1 Investigation Areas

Under the applicable requirements of the PPCD (Section X-C), the emergency actions investigation areas included a 10-foot buffer zone around the Property perimeter and the CITA perimeter (**Figure 3-1**). A digital grid system was established over the Property for the purpose of mapping and tracking the investigation areas. The grid system used the Universal Transverse Mercator (UTM) Washington South coordinate system to define transects of the Property/CITA boundary and establish grid cells using 500-foot by 500-foot intervals. **Figure 3-2** shows this grid system as used to document these emergency action efforts. As the buffer zone along the fence lines was 10 feet in width, the actual investigation areas were usually 500 feet by 10 feet (5,000 square feet).

Grid cells were labeled in an alpha-numeric pattern. Cell columns, running west to east, were labeled A through GG. Cell rows, running south to north, were labeled numerically, 1 through 28. For example, a grid cell intersecting Column A, Row 3 was labeled A3 (**Figure 3-1**).

Field personnel were supplied with Global Positioning System (GPS) coordinates at the intersections of the perimeter boundary and the grid. Field personnel installed surveyor stakes with the grid number written on the stakes at the start and stop point of each grid along the Property and CITA perimeter fence lines. Field personnel then used these stakes to identify the starting or stopping points for MEC surface clearance work in each grid along these fence lines.

3.1.1 Property Perimeter

For the emergency actions, the investigation area was established as an area 10 feet wide from the perimeter fence into the Property. The Property perimeter extends approximately 11.4 miles. **Figure 3-1** shows the Property perimeter. Section 3.1.4 discusses grids not completed around the property perimeter.

3.1.2 CITA Perimeter

For the emergency actions, the investigation area was established as an area 10 feet wide area along the exterior of the CITA perimeter. This area differed from the specified area in the PPCD, which was a 10 feet wide area along the interior side of the CITA perimeter. This deviation was approved by WDOE because of public safety and ease of fence repair. The CITA boundary extends approximately 3.6 miles. **Figure 3-1** shows the CITA perimeter. All grids were completed around the CITA perimeter.

3.1.3 Creek Areas

For the emergency actions, a Clark County programmatic habitat permit was required for disturbing vegetation (in this case, brush clearance) within 200 feet of any surface water body. This permit required manual brush clearance methods to be used within that buffer zone around a surface water body. A copy of the final programmatic habitat permit is

provided here as Attachment A. **Figure 3-2** shows the locations of grids where manual brush clearance was performed under this permit.

3.1.4 Exclusion Grids

For the emergency actions, surface clearance could not be accomplished for several grids because of their proximity to residential housing or seasonal flooding. These grids will be completed at a later date to be determined by BCRRT, WDOE, and Clark County. The Property perimeter grids not completed for the emergency actions were A1-A4, A8-A17, B8, B9, C8, C9, B1, C1, D1, E1, F1, G1, U6, V6, FF7, FF8, and FF13-FF16. **Figure 3-2** shows the locations of the exclusion grids. The emergency actions for these areas will be documented in an EAR addendum to close these emergency actions.

3.2 Documentation

The Senior UXO Supervisor (SUXOS) recorded all activities and tracking of progress of MEC emergency actions as Daily Reports, which are provided here as **Attachment A**. Equipment testing is discussed in **Section 3.3**, with the testing documentation provided as **Attachment B**. For surface clearance tracking, field personnel were supplied with Grid Data Log (GDL) forms (provided in **Attachment C**) for the purpose of documenting surface clearance activities.

GDL forms contained areas for both general information about the grid and specific information to be completed if any MEC items were found in that grid. The GDL form for each grid completed by the field personnel were loaded into the Baker File Transfer Protocol (FTP) site within one working day of completion of that grid. The completed GDL forms have been updated with the information gathered in the field and are presented in **Attachment D**.

The MKM UXO Quality Control Supervisor (UXOQCS) and the WDOE Quality Assurance (QA) representative conducted Quality Control/Quality Assurance (QC/QA) fieldwork, which was documented on the QC/QA GDL form (provided in **Attachment E**) as the emergency action progressed. Areas surveyed for QC/QA within a selected grid were documented by the QC/QA surveyors by recording the starting and ending GPS coordinates for the areas surveyed for QA/QC purposes. The completed QA/QC GDL forms have been updated with the information gathered in the field and are presented in **Attachment F**.

QA activities commenced on January 10, 2007 and were completed on January 15, 2007. QA was not accomplished on the 32 grids identified in **Section 3.1.4** since MEC surface clearance was not accomplished on these grids. MEC surface clearance of these 32 these grids will be conducted at a later date to be determined by BCRRT, Clark County, and WDOE.

Of the 130 grids where MEC surface clearance has been conducted, QA MEC surface surveys were conducted on ten percent or 13 grids. A separate QA will be accomplished for ten percent of the 32 remaining grids.

3.3 Equipment Testing

The instrument used for the magnetometer-assisted surface clearance is the Schonstedt 52-cx flux gate magnetometer. This instrument was selected based on the results of the calibration grid/prove-out designed by MKM and WDOE. **Attachment B** contains the Memo of Record for the construction of the grid/prove-out area. **Attachment B** also contains the weekly instrument checks conducted to verify the continuing performance of the Schonstedt instruments using the grid/prove-out area.

The Garmin eTrex hand-held GPS system was used for positioning and reacquisition information. This instrument was selected by MKM and WDOE as the most reliable and cost effective solution for initial positioning and reacquiring of targets. Field tests were conducted by MKM and WDOE personnel to verify the performance of this GPS system at Camp Bonneville. **Attachment B** contains the Memo of Record for this field testing of the Garmin GPS system.

The equipment used during the MEC surface clearance emergency action was tested and approved by WDOE. The testing results indicated that the GPS and magnetometer instruments designated for the MEC surface clearance were acceptable for the planned surface clearance activities.

3.4 Anomaly Avoidance and Brush Clearance

Before the approval of the TCRA ESS, the anomaly avoidance and brush clearance procedures in the EAWP, Section 3.1.2 were followed.

UXO technicians conducted a magnetometer-assisted anomaly avoidance surface sweep of the 10-foot vegetation removal lane. Upon completion of these sweeps and where no anomalies were identified, brush removal crews proceeded with brush clearance.

Brush removal crews used a variety of equipment (chain saws, bladed weed eaters, brush cutters, and other manually operated tools) and mechanical equipment (a Bobcat™ skid-steer tool carrier with a brush cat attachment) to remove vegetation to a level of approximately 6 inches above the ground surface. Even after anomaly avoidance actions, the vegetation removal crews included UXO personnel to provide safety support to the vegetation removal team. During manual vegetation removal, personnel using manual vegetation clearance tools maintained a minimum separation distance of 500 feet and followed all safety and health precautions outlined in the HASP and APP.

Anomaly avoidance and brush clearance activities commenced on October 30, 2006 and were completed on December 19, 2006, with the exception of a 500-foot area at the southwestern corner of the Property. The anomaly avoidance and brush clearance activities were not performed in this area because of seasonal flooding. Brush clearance and MEC surface clearance activities in this area for this area will be performed at a later date to be determined by BCRRT, Clark County, and WDOE. **Table 3-1** gives the weekly production rates accomplished for anomaly avoidance and brush clearance activities. **Figure 3-3** illustrates the weekly progress achieved.

3.5 Surface Clearance

Qualified UXO technicians traversed 100% of areas to be cleared using Schonstedt magnetometers insuring that all MEC items on the surface of the ground or penetrating the plane of the ground

surface could be located. Three-person teams, consisting of a team leader and two UXO technicians, conducted the surface clearance for each grid.

Table 3-1. Summary of Anomaly Avoidance and Brush Clearance

Week	Linear Footage Cleared ¹
1	10,190
2	16,620
3	5,700
4	10,276
5	5,315
6	9,655
7	4,696
Total	62,452

¹ Distance cleared over a 10-foot wide area.

All team leaders were certified UXO Level III Technicians. Each team leader was responsible for ensuring that surveys were performed at an appropriate speed and that 100% of the surface area of the investigation grid was surveyed. The two UXO technicians on each team were responsible for performing the magnetometer-assisted surface clearance. Technicians were assigned a 5-foot lane in which they were responsible for performing surface clearance. Technicians were responsible for walking over their entire areas

Teams were provided GDL forms with GPS data and a map of each grid map for establishing the start and stop location for survey work in each grid. Copies of all completed field GDL forms are provided in **Attachment C**. In addition, field personnel placed wooden stakes at the start and stop location of each grid to ensure 100% coverage.

MEC surface clearance activities commenced on January 10, 2007 and were completed on January 15, 2007. The MEC surface clearance was not undertaken in the 32 grids identified in **Section 3.1.4** because their proximity of residential housing. These grids will be surface cleared at a later date to be determined by BCRRT, Clark County, and WDOE. **Attachment C** contains copies of the field GDL forms completed during the surface activities. **Attachment D** contains copies of the final GDL forms with the field-collected information inserted. These GDL forms have been modified since the submittal of the EAWP Addendum, but, the revised GDL forms contain, at a minimum, the same information specified in the EAWP Addendum.

A total of 162 grids were established for surface clearance; of those, 32 will be done at a later date. The Property perimeter consists of 89 grids where MEC surface clearance has been completed, and the CITA perimeter consists of 41 grids where MEC surface clearance has been completed.

3.6 Quality Control

The UXOQCS performed QC testing of the surface clearance. Ten percent of the surface cleared grids (13) were identified for QC. The UXOQCS used a pass/fail criterion when inspecting the QC of the MEC surface clearance: any MEC item or 4 or more munitions debris (MD) items greater than 2 by 2-inches found within the grid was considered a failure. The UXOQCS performed the QC inspection by conducting a magnetometer-assisted MEC surface clearance of the grid. **Figure 3-4** shows the grids identified for QC.

The UXOQCS was provided with the completed GDL forms as a means of inspecting the quality of the surface clearance activities. The UXOQCS ensured that all information was accurate and correct on the GDL forms.

QC activities commenced on January 10, 2007 and were completed on January 15, 2007. **Attachment E** contains the field QC/QA GDL forms completed during the surface clearance QC activities. **Attachment F** contains the final QC/QA GDL forms that have had the field information added to them.

Of the 130 surface cleared grids, 13 (10%) were QC tested. A separate QC test will be accomplished for the 32 perimeter fence line grids where the MEC surface clearance has not yet been completed to the proximity of residential properties.

3.7 Quality Assurance

The WDOE representative performed QA testing of the MEC surface clearance. This QA testing was identical in scope and methods to the MKM QC testing. Ten percent of the surface cleared grids (13) were identified for QA testing. The MKM QC and WDOE QA tests were conducted on the same 13 grids to maximize comparison of QC and QA findings. The WDOE used a pass/fail criterion when inspecting the QA of the surface clearance: was any MEC item or 4 or more munitions debris (MD) items greater than 2 by 2 -inches found within the grid was considered a failure. The WDOE representative performed the QA inspection by conducting a magnetometer-assisted MEC surface clearance of the grid. **Figure 3-4** shows the grids identified for QA testing.

The WDOE representative was provided with the completed GDL forms as a means of inspecting the quality of the surface clearance activities.

Quality assurance activities commenced on January 10, 2007 and were completed on January 15, 2007. **Attachment E** contains the field QC/QA GDL forms completed during the surface activities. **Attachment F** contains the final QC/QA GDL forms that have had the field information input into them.

Of the 130 surface cleared grids, 13 (10%) were QA tested. A separate QC test will be accomplished for the 32 perimeter fence line grids where the MEC surface clearance has not yet been completed to the proximity of residential properties.

4.0 SUMMARY OF FINDINGS

4.1 Munitions of Explosive Concern (MEC)

No MEC items were identified in any of the 130 grids evaluated as part of the emergency actions.

4.2 Munitions Debris (MD) Findings

MD was found in four adjacent grids on the northern side of the CITA. A total of 9.5 pounds (lbs) of MD were identified and removed from these four grids: U18, V18, W18, and X18 (**Figure 4-1**). **Table 4-1** gives the relevant information for these MD findings. These four grids were inspected by WDOE and will not require additional investigations or step-out grids.

MD materials were not disposed of at this time, but were stored in a secure area designated for MD storage. This MD material will be consolidated with MD from future MEC removal efforts on the Property for later off-site recycling.

Table 4-1. Summary of Munitions Debris Findings

Grid	Pounds	Action Required
U18	1.0	NFA
V18	2.5	NFA
W18	5.0	NFA
X18	1.0	NFA

NFA = No further action

4.3 Quality Control/Quality Assurance (QC/QA) Pass/Failures

All of the 13 grids identified on **Figure 3-4** for QC/QA inspection were given passing grades in compliance with the requirements of the EAWP Addendum.



5.0 CONCLUSIONS

5.1 Property Perimeter

All activities were performed in accordance with the applicable controlling documents including the TCRA ESS, the EAWP, the EAWP Addendum, the HASP and APP, and the Cultural and Historical Resources Protection Plan. The MEC surface clearance activities were found to be acceptable based on the QC and QA test results. For the 89 Property perimeter grids that were MEC surface cleared, no further MEC investigation is required.

5.2 Central Impact Target Area (CITA) Perimeter

All activities were performed in accordance with the applicable controlling documents including the TCRA ESS, the EAWP, the EAWP Addendum, the HASP and APP, and the Cultural and Historical Resources Protection Plan. The MEC surface clearance activities were found to be acceptable based on the QC and QA test results. For the 41 CITA grids that were MEC surface cleared, no further MEC investigation is required.

5.3 Health and Safety and Accident Prevention

These emergency actions were conducted with no accidents or injuries to field or support personnel.

5.4 Cultural and Historical Resources Protection Report

No cultural or historical resources were discovered during these emergency actions. Further, no cultural or historical artifacts of any kind or period were uncovered during these emergency actions. Based on this finding, the requirements of Paragraph 113 of the PPCD is deemed to be satisfied and a separate Cultural and Historical Resources Report is not required or appropriate.



AVERY

6.0 LESSONS LEARNED

6.1 MEC Activities

The major constraint encountered for the emergency actions was the implementation time period. The performance period fell within the heaviest rainfall season for the State of Washington. The heavy rainfall created safety hazards for the workers. Future actions will be modified to perform many of the operations in areas of steep terrain during the drier months.



7.0 REFERENCES

BCRRT. Emergency Action Work Plan, Remedial Action Unit 3. October 2006.

BCRRT. Emergency Action Work Plan, Remedial Action Unit 3 Addendum. January 2007.

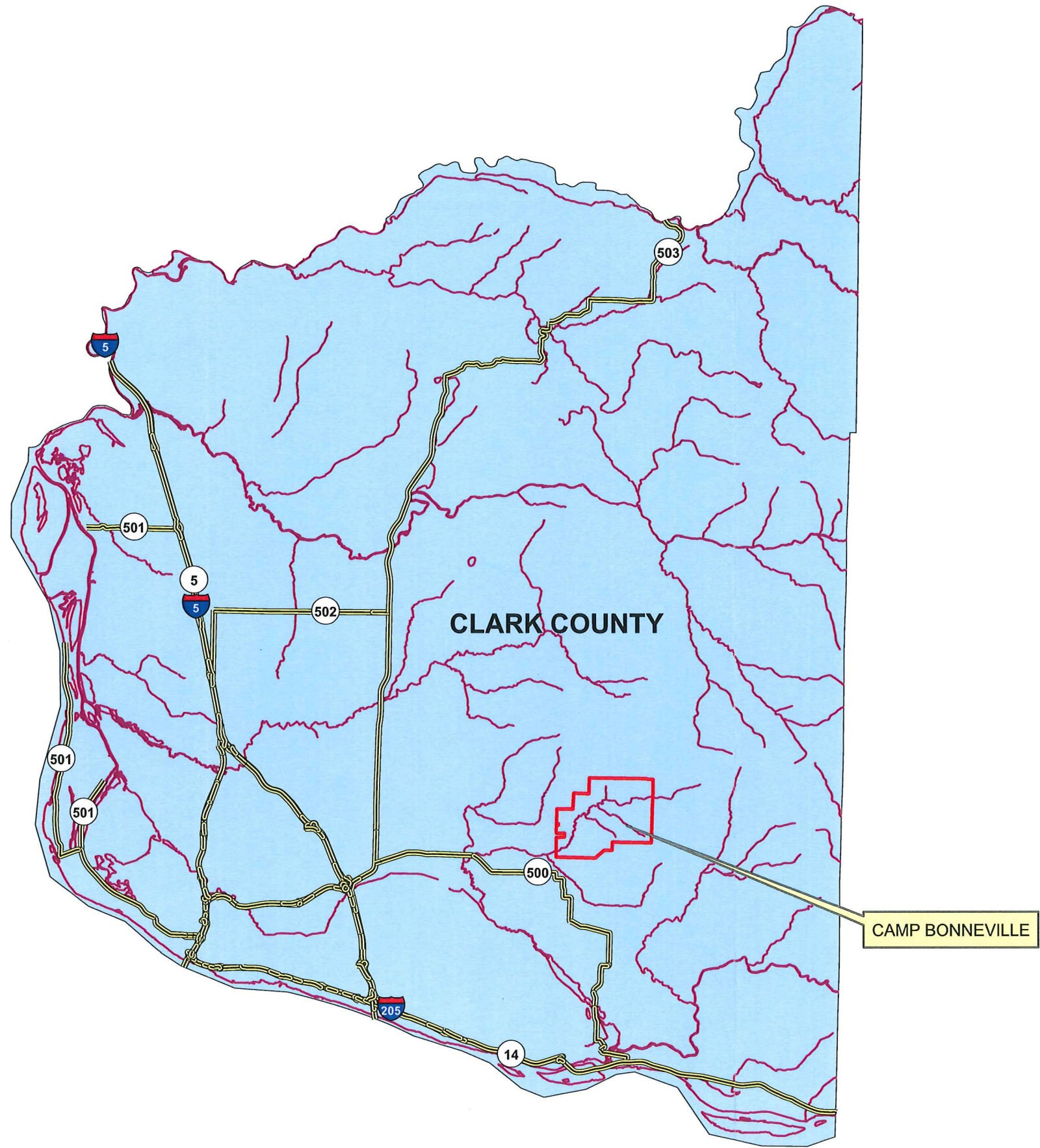
MKM Engineers, Inc. Time Critical Removal Action – Explosive Safety Submission. December 2006

Michael Baker Jr., Inc. Camp Bonneville Cultural and Historical Resources Protection Plan. Prepared for Bonneville Conservation, Restoration and Renewal Team, LLC. November 2006.

Michael Baker Jr., Inc. Health and Safety Plan. Prepared for Bonneville Conservation, Restoration and Renewal Team, LLC. October 2006.



FIGURES



Legend

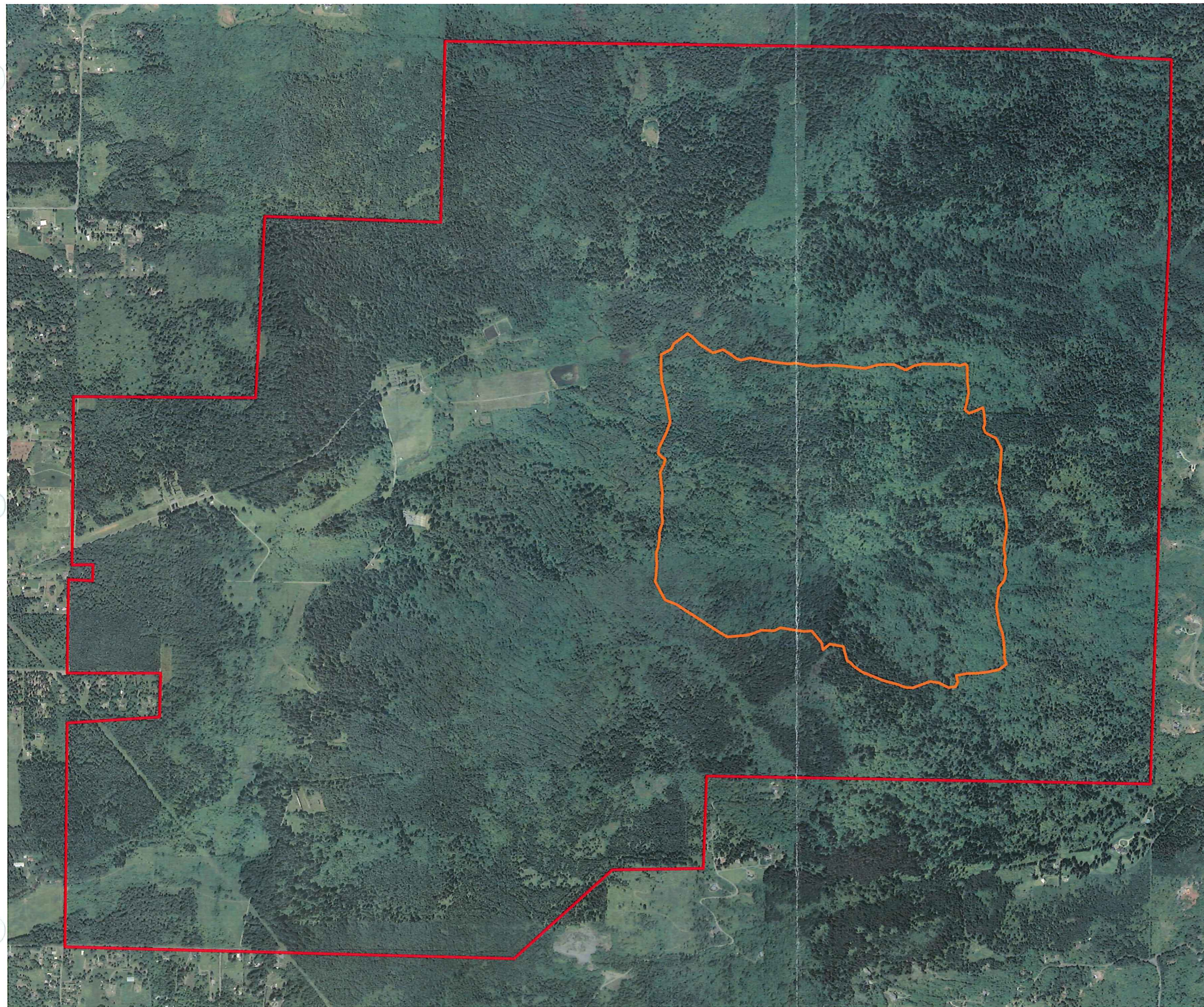
-  Stream
-  Highway
-  Boundary





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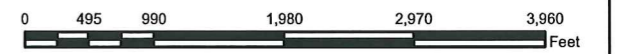
Figure 1-1. Camp Bonneville Military Reservation, Washington


Drawn On: 11/09/2006 Drawn By: QX Reviewed By: ES



Legend

-  CITA Fence (Total 19,133 ft)
-  Boundary (Total 60,263 ft)



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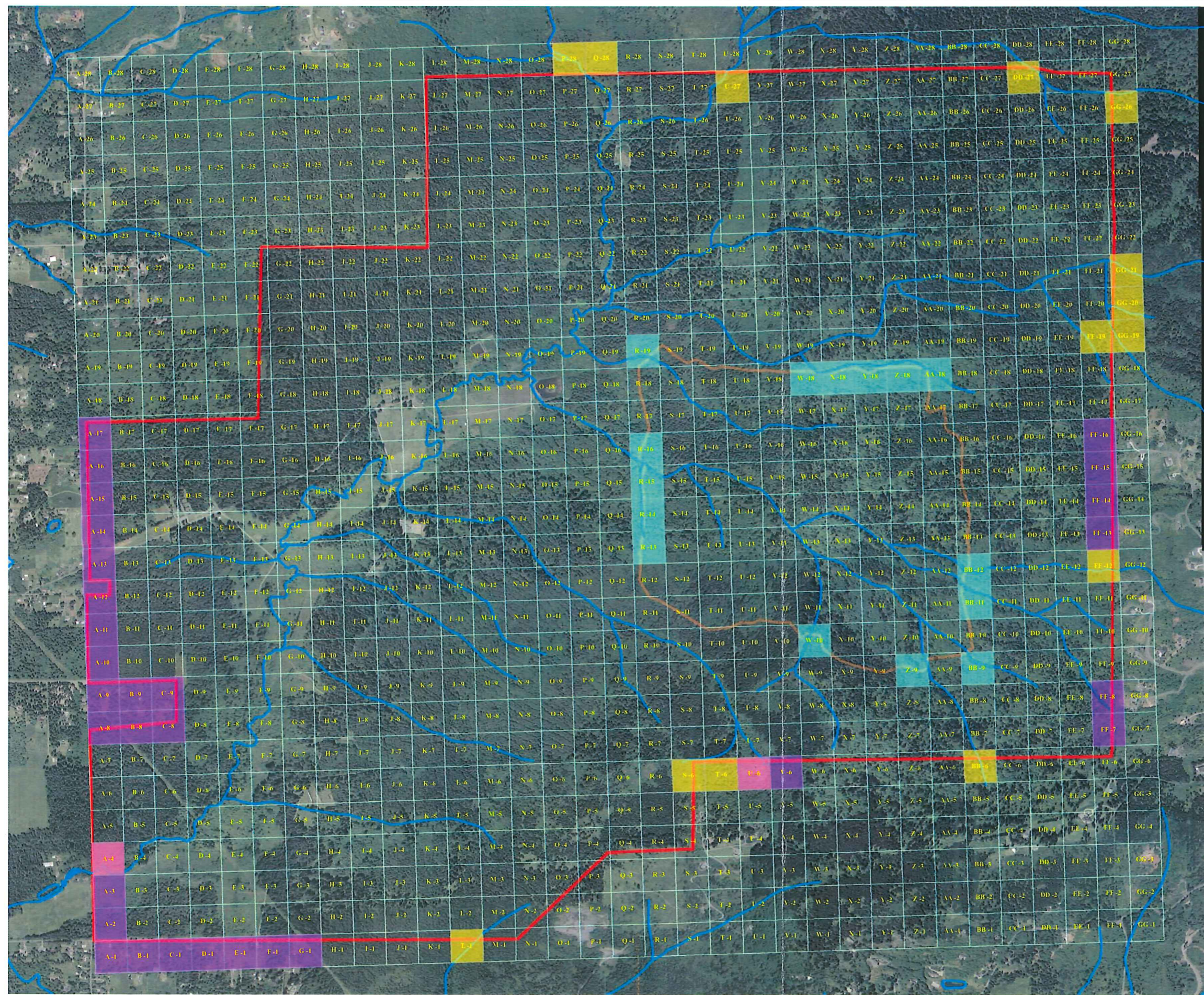
 **PIKA**
INTERNATIONAL, INC.

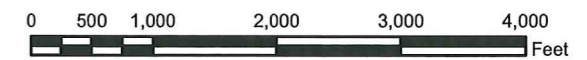
Figure 1-2. Perimeter/CITA for
Emergency Actions

Drawn On: 01/26/2007 Drawn By: QX Reviewed By: ES



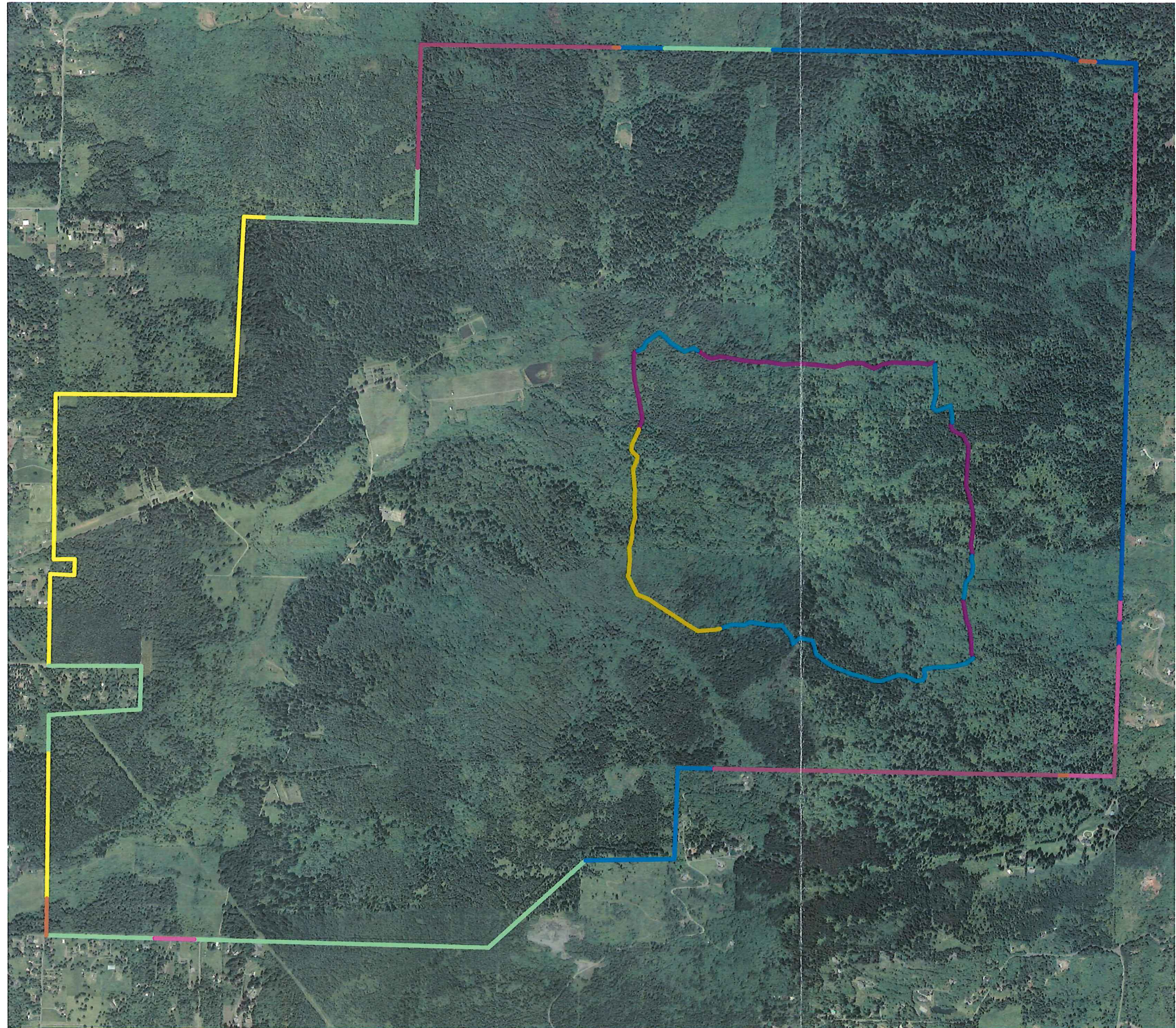
Legend

- Boundary
- CITA
- Creeks
- Grids (500x500)
- Exclusion Area Grids
- Sensitive Area Grids on CITA
- Sensitive Area Grids on Perimeter
- Combined Exclusion and Sensitive Area Grids



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FIGURE 3-2. Camp Bonneville Military Reservation Sensitive Ecological Areas / Exclusion Grids



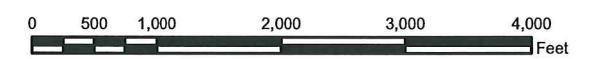
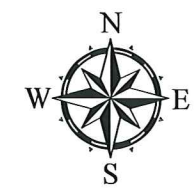
Weekly Tracking

Perimeter Weekly Progress

- 10-30-06 to 11-04-06, 10,202 ft
- 11-06-06 to 11-11-06, 17,847 ft
- 11-13-06 to 11-18-06, 5,700 ft
- 11-27-06 to 12-02-06, 10,276 ft
- 12-04-06 to 12-09-06, 5,315 ft
- 12-11-06 to 12-16-06, 7,700 ft
- 12-17-06 to 12-19-06, 768 ft

CITA Weekly Progress

- 12-17-06 to 12-19-06, 3,923
- 12-11-06 to 12-16-06, 7,700 ft
- 12-04-06 to 12-09-06, 7,510 ft





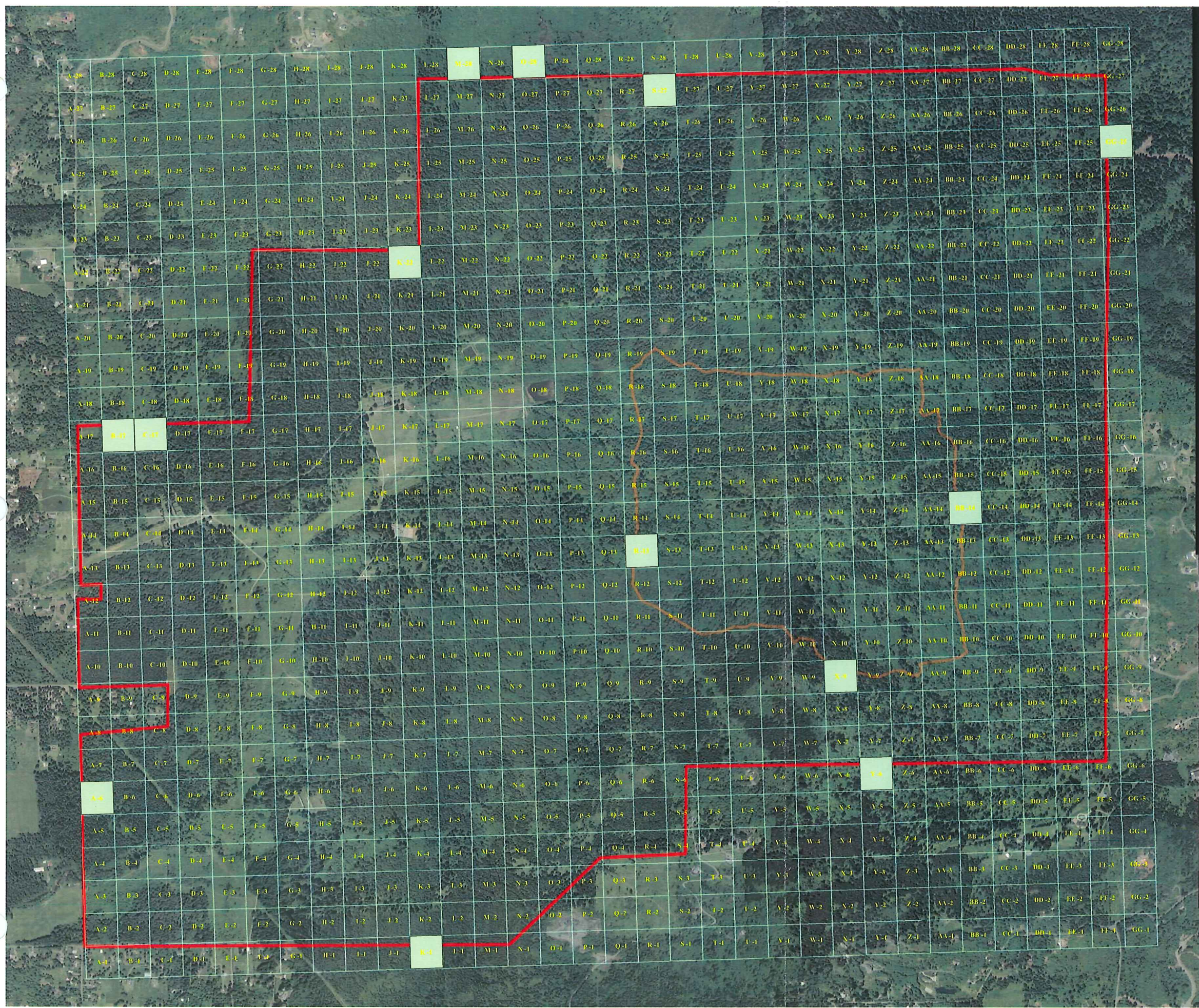





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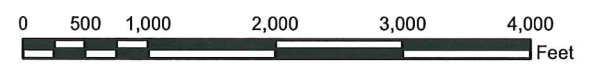
FIGURE 3-3. Vegetation Clearance Map

Drawn On: 01/26/2007 Drawn By: QX Reviewed By: ES



Legend

-  Boundary
-  CITA
-  Grids (500x500)
-  QA/QC Grids

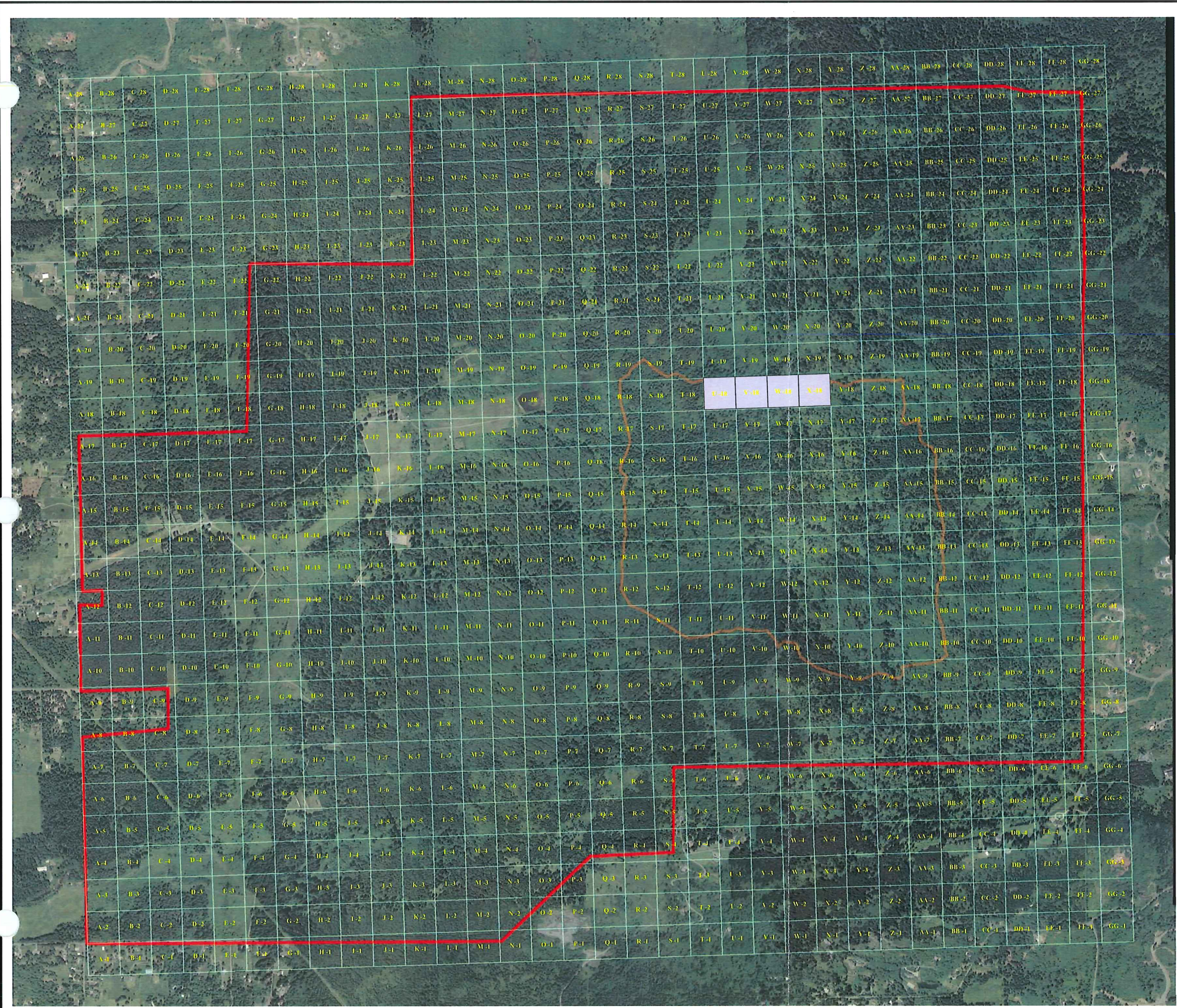


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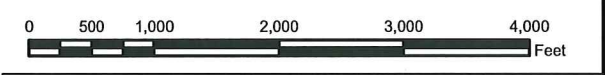
FIGURE 3-4. Camp Bonneville Military Reservation QC/QA Grids

Drawn On: 01/26/2007 Drawn By: QX Reviewed By: ES



Legend

- Boundary
- CITA
- Grids (500x500)
- Munitions Debris Grids



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PIKA
INTERNATIONAL, INC.

FIGURE 4-1. Munitions Debris Findings



ATTACHMENT A
PROGRAMMATIC HABITAT PERMIT

TYPE I PROGRAMMATIC PERMIT STAFF REPORT & DECISION



Case Nos: HAB2006-00248 and WET2006-00071

Project name Camp Bonneville Programmatic Permit

Project Area Camp Bonneville Site

Decision Date: December 13, 2006

Expiration Date: December 13, 2011 (unless re-authorized)

Applicant/Owner: Clark County Department of Public Works
ATTN: Jerry Barnett
PO Box 9810
Vancouver, WA 98666

Request: Programmatic habitat and wetland permit approval for clearing and minor grading to remove munitions and explosives of concern and maintain specified clear zones adjacent to existing roads and fence lines.

Decision: APPROVAL, with conditions

County Staff:

Travis Goddard, Rural Team Leader	360/397-2375 Ext 4180
David Howe, Lead Habitat Biologist	360/397-2375 Ext 4598
Brent Davis, Lead Wetland Biologist	360/397-2375 Ext 4152

Team Leader Initials:

ATG

Date Issued:

12/13/06

Applicable Laws:

Clark county Code Chapters: 40.440 (Habitat Conservation), 40.450 (Wetland Protection Ordinance) and 40.510.010 (Type I Procedure).

Background and Summary of the Proposal

The State Growth Management Act (GMA) requires periodic reviews and updates to city and county critical areas ordinances. Clark County (County) began its latest round of code updates in 2004, adopting its first ordinance update in April 2005 (for CARAs), and the most recent in July 2006 (for agricultural impact to habitats). The County's 2006 Critical Areas Ordinance updates to habitat conservation and wetland protection code sections include specific provisions for programmatic permits for routine maintenance and operations associated with public agencies.

Camp Bonneville activities fall generally into one of three categories:

1. Exempt activities such as routine maintenance of fence lines and roadsides located outside designated critical areas, and that generally do not require land use or permit reviews;
2. Activities within designated critical areas such as routine maintenance activities identified within the plan and conducted using best management practices and specific mitigation measures;
3. Other activities and facilities requiring land use or permit reviews such as new facilities or significant grading activities in critical areas.

The proposed Critical Areas Management Plan primarily addresses specific activities within the second category—activities within designated critical areas—and identifies the specific activities, management practices, and mitigation required within them.

Issues:

A complete analysis was conducted to determine if the proposal identified above meets the applicable approval criteria. As part of this permit application, the applicant is required to adhere to all approval criteria and standards contained within the "Applicable Laws" listed above. The following issues, because of their significance, are discussed in detail:

General

This programmatic authorization exempts the applicant from the requirement to obtain additional permits for the activities specified in the approved plan. It does not exempt the applicant from any of the conservation and/or protection standards of the Habitat Conservation or Wetland Protection Ordinances.

Habitat Conservation (CCC 40.440)

Under Title 40.440.040(A) the Habitat Conservation Ordinance (HCO), Clark County Public Works is requesting Programmatic Permit approval of normal vegetation maintenance and repair work within mapped or defined Priority Habitat or Species (PHS) areas. The HCO further defines riparian priority habitat Title 40.440.010(C)(1) as the following:

a. *Riparian Priority Habitat. Areas extending outward on each side of the stream (as defined in Section 40.100.070, Definitions) from the ordinary high water mark to the edge of the one hundred (100) year floodplain, or the following distances, if greater:*

(1) *DNR Type S (shorelines) waters, two hundred fifty (250) feet;*

(2) *DNR Type F (fish-bearing) waters, two hundred (200) feet;*

(3) *DNR Type Np (non-fish bearing, perennial) waters, one hundred (100) feet;*

(4) *DNR Type Ns (non-fish bearing, seasonal) waters, seventy-five (75) feet.*

The applicant has submitted a complete analysis and plan demonstrating how their vegetation maintenance and repair work along existing fence lines and/or roads conforms or can conform to the HCO. As a result, staff finds all vegetation maintenance conducted by the applicant to comply with Title 40.440, subject to the following conditions of approval (see Conditions below).

Wetland Protection (CCC 40.450)

Under Title 40.450.040(K) the Wetland Protection Ordinance (WPO), Clark County Public Works is requesting Programmatic Permit approval of normal operating, maintenance, repair, and enhancement procedures within jurisdictional wetlands and wetland buffers. Wetlands are defined in CCC 40.100.070 as follows:

“Wetland” or “wetlands” means areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

In the absence of a wetland determination by a qualified wetland specialist, the best resource for locating potential wetlands in the field is the Wetland Areas shown on the Site Plan Map attached to the proposed Critical Areas Management Plan (Figure 2).

Wetland buffers are determined by applying the Washington Department of Ecology *Wetland Rating System for Western Washington* in conjunction with the land use intensity of the proposed activity. All of the activities proposed in the application are Low Intensity Uses per Table 40.450.030-5, therefore wetland buffers can range between 25 and 150 ft. However, the specific activities proposed by the applicant will not further degrade habitat function in wetland buffers; therefore 50 ft. buffers on all mapped potential wetland areas will be sufficient to protect water quality functions of all potential wetland areas.

The applicant has submitted a complete analysis and Critical Areas Management Plan demonstrating how their operating, maintenance, and clearance procedures for roadsides and fence lines are exempt from or comply with the WPO. As a result, staff finds that the activities proposed by Clark County Public Works for fence lines and roads to comply with the Title 40.450, subject to the following conditions of approval (see Conditions below).

Decision:

Based upon this review, the Development Services Director hereby **APPROVES** the request, subject to the following conditions of approval.

Conditions:

Note that approval conditions for this permit may be modified in the future through the annual reporting and re-authorization process outlined in Section 5.1 of the approved plan.

General Conditions

- G-1 Authorization for this permit shall be granted for five years from the date of approval unless the duration is extended under the proposed annual re-authorization procedure (Section 5.1);
- G-2. All future clearing, maintenance, and repair of fences and roads shall be accomplished per the plans entitled "Clark County Public Works Programmatic Permit and Critical Areas Management Plan for Camp Bonneville" prepared by the Bonneville Conservation Restoration and Renewal Team, LLC and dated November 2006, except as amended herein;
- G-3. All crews shall have a copy the approved permit, subsequent re-authorization documents, approved Critical Areas Management Plan;
- G-4 Annual reporting of administration of this permit provided to the Community Development Department shall begin January 2, 2008. Reports shall comply with the reporting plan listed in Section 5.1 of the Critical Areas Management Plan as further modified by conditions listed below.

Specific Wetland Conditions

- W-1. All work within 50 ft. of mapped wetland areas shall comply with the approved Critical Areas Management Plan unless a wetland determination documents that mapped areas are not wetlands OR the wetland rating warrants a smaller buffer.
- W-2 Annual reports shall include records of any wetland determinations and/or wetland rating forms used to modify the areas subject to Condition W-1 above.

Appeal Process:

Copies of the approved final site plan and staff review checklist are available for review at the Clark County Department of Community Development. The Development Services Manager reserves the right to develop a complete written report and findings of fact regarding this decision, if appealed.

An **appeal** of any aspect of this decision, including any required mitigation measures, may be appealed to the County Hearing Examiner only by a party of record. A "Party of Record" includes the applicant and those individuals who submitted written testimony to the Development Services Manager within the designated comment period.

The appeal shall be filed with the Department of Community Development within fourteen (14) calendar days from the date the notice of final land use decision is mailed to parties of record. This decision was mailed on December 13, 2006. Therefore any appeal must be received in this office by 4:30 PM, December 27, 2006.

<p style="text-align: center;">APPEAL FILING DEADLINE Date: December 27, 2006</p>

Any appeal of the final land use decisions shall be in writing and contain the following:

1. The case number designated by the County and the name of the applicant;
2. The name and signature of each person or group (petitioners) and a statement showing that each petitioner is entitled to file an appeal as described under Section 40.510.010(E) of the Clark County Code. If multiple parties file a single petition for review, the petition shall designate one party as the contact representative with the Development Services Manager. All contact with the Development Services Manager regarding the petition, including notice, shall be with this contact person;
3. The specific aspect(s) of the decision and/or SEPA issue being appealed, the reasons why each aspect is in error as a matter of fact or law, and the evidence relied, on to prove the error; and,
4. A check in the amount of **\$1021** (made payable to the Department of Community Development).

The appeal request and fee shall be submitted to the Department of Community Development, Customer Service Center, by 4:30PM Monday through Friday, at the address listed below.

A copy of the approved Critical Areas Management Plan and Clark County Code are available at:

Department of Community Development
1300 Franklin Street
P.O. Box 9810

Vancouver, WA 98666-9810
Phone: (360) 397-2375; Fax: (360) 397-2011

A copy of the Clark County Code is also available on our Web Page at:
Web Page at: <http://www.clark.wa.gov>

Attachments:

Exhibit A Approved Critical Areas Management Plan

H:\DEVELOPMENTSERVICES\Environmental\Wetlands\Programmatic Permits\WET2006-00071(Camp Bonneville)\WET2006-00071(rpt).doc

(12/13/06)



Clark County Public Works

Programmatic Permit and Critical Areas Management Plan Camp Bonneville

1. Introduction

This Programmatic Permit and Management Plan (Plan) provides land use and permit authorization for routine and recurring activities within designated critical areas at the Camp Bonneville site (Site), and which are performed by Clark County Public Works (applicant) and the Bonneville Conservation Restoration and Renewal Team (BCRRT) (owner), their employees, contractors or sub-contractors to maintain the site. The plan complies with the critical areas provisions of the Clark County Code (CCC) detailed under chapters:

- 40.440 Habitat Conservation
- 40.450 Wetland Protection

Clark County Public Works is requesting Programmatic Permit approval of maintenance and repair activities within mapped or defined Priority Habitat or Species (PHS) areas, including riparian priority habitat areas, and within jurisdictional wetlands and wetland buffers located at the Site. The maintenance and repair activities are associated with the need to maintain a cleared area around roads, trails, and fences at the site.

The programmatic permit will specifically cover the following activities:

1. Initial clearance of 10-foot buffer around the perimeter and Central Impact Target Area (CITA) fences.
2. Initial clearance of 20-foot buffer on either side of all roads and trails on the property.
3. Maintenance of the 10 and 20-foot buffer areas.

1.1 Project Background

Camp Bonneville is located at 23201 NE Pluss Road in southeastern Clark County, Washington, about 12 miles east of Vancouver and 7 miles north of the Columbia River. It was established in 1909 as a drill field and rifle range for Vancouver Barracks and has been used primarily as a training camp for various branches of the military. The property is identified as Tax Assessor Parcels 167837-000, 167940-000, 168044-000, 170186-000, 170393-000, 170394-000, 170398-000, 208215-000, 208417-000, and 208619-000. The site is approximately 3,840 acres and has a Comprehensive Plan Designation of Forest Tier I. The zoning designation is Forest Tier I-80. The current property owner is the BCRRT.

The property is largely undeveloped; more than half of its six square miles is forested. The site is situated at the edge of the Cascade foothills, with elevations ranging from 289 feet to 1,600 feet. Unexploded ordnance (UXO) and various contaminants are present in some areas of the site.



1.2 Project Description

1.2.1 Fences

Since the site closed in 1995, the Property has been on caretaker status, with minimal maintenance of camp facilities. During this 10-year period, the condition of both the perimeter and CITA fencing has suffered from the growth of vegetation, tree falls, logging, and vandalism. This is particularly true of the five-strand barbwire fencing used along the north, east and south borders of the site perimeter and along the entire boundary of the CITA. Control of site access is a critical Institutional Control for Camp Bonneville and the repair or replacement of damaged or missing fencing is vital and required to upgrade site access control during the investigation and cleanup of the Property.

The Washington Department of Ecology (WDOE) issued an emergency order requiring the establishment and maintenance of fences along the site property lines and along the interior perimeter of the CITA. This action is necessary to protect the public from existing explosive safety hazards present on the site. To meet the requirements of the emergency order, a 10-foot wide access area along the perimeter and CITA fence lines needs to be cleared. This access area will allow for fence inspection, repair, replacement, sign posting, and general maintenance activities.

All damaged or missing fence will be repaired or replaced with new wire and posts as necessary to maintain site access controls. The majority of the fence is comprised of a 5-strand barbwire with metal posts. Portions of the western perimeter fence consist of 6-foot high chain link security fence (to be repaired only). The repaired or restored fence will be ensured along the entire existing fence alignment.

Initial clearing activities will include those outlined below. Once the areas have been cleared, periodic maintenance activities will need to occur to maintain the cleared areas.

CITA Fence

Along the perimeter of the CITA fence, brush and surface MEC (munitions and explosives of concern) clearance will occur along a 10-foot wide strip inside of the fence. Of the 19,132-foot fence, approximately 8,000 feet will be replaced and 9,000 feet will be repaired. The fence will be 4-strand barbwire. The fence is generally in need of repair from windfall damage. Repair work will include wire repair and post replacement.

All of the existing warning signs posted along the fence will be replaced; approximately 420 signs at 50-foot intervals.

Perimeter Fence

Brush and MEC surface clearance will occur along a 10-foot wide strip inside the fence for the entire perimeter of Camp Bonneville. The fence along the northern boundary (15,750 ft) features extensive windfall damage and will require substantial post and wire repair (7,000 ft) and restoration (7,500 ft). The southern boundary fence (17,560 ft) is in relatively good condition with minor windfall damage that requires some fence repair (7,500 ft) and restoration (3,500 ft). The eastern boundary (10,440 ft) of the site is missing sections of the fence and has some damage, which will require extensive restoration (7,000 ft) and some repair (2,500 ft) work. The northern, southern, and



eastern fences are all 5-strand barbwire. The western fence (16,560 ft) is primarily chain link fence in good condition with minor repair (1,200 ft) and restoration (1,200 ft) requirements due to windfall.

All of the existing perimeter fence warning signs posted along the fence will be replaced; signs will be placed at 50-foot intervals.

1.2.2 Roads and Trails

WDOE, Clark County, and the BCRRT agreed to a Perspective Purchaser Consent Degree (PPCD) with the mutual objective of providing for remedial actions on the property. The PPCD requires a 20-foot cleared zone on either side of all roads and trails at the site. Since the perimeter road runs adjacent or near the fence line for much of the property, there will ultimately be an area between 10 feet and 30 feet cleared around the site perimeter. The purpose of the cleared area alongside roads and trails is to provide an additional safe area for road and trail users and to aid in the detection of MEC.

There are approximately 47 miles of road/trails on the site: paved roads (1.078 miles), gravel roads (11 miles), and dirt tracks/trails (35 miles).



2. Background

The Washington State Growth Management Act (GMA) requires cities and counties to update review and update their critical areas ordinances periodically. Clark County most recently updated their habitat and wetland ordinances in 2006. These updates to the habitat conservation and wetland protection ordinances included provisions for the issuance of programmatic permits for routine maintenance and operation activities of utilities and public facilities.

This plan addresses activities within designated critical areas, such as routine maintenance activities, conducted using best management practices and specific mitigation measures.



3. Purpose and Need

This Plan authorizes the County to perform initial clearance and routine maintenance activities associated with the repair and maintenance fences along the property line and maintenance of a cleared zone alongside roads and trails. The Plan outlines best management practices/statement of procedures that will be followed during the described activities by the County for any vegetation-disturbing activities within critical areas. The Plan meets the requirements of the provisions for critical areas protection presented in the CCC, Chapter 40.

A programmatic permit covering the activities described above will allow for the continued maintenance and repair at the site. Maintaining a secure fenceline is essential to protect the public from existing explosive safety hazards present on the site. Maintenance of roads and trails is necessary to provide additional safety along road/trail areas and to aid in the detection of MEC.



4. Exemptions

Certain activities that will be performed at the site are classified as exempt under the county code and do not require land use or permit reviews. Exempt activities are outlined below.

4.1 Habitat Conservation Areas (§40.440)

The following activities are exempt from habitat conservation provisions as presented in CCC §40.440.010(B)(3)(a) and (b).

- (a) All proposed activities outside designated habitat areas are exempt from review under this chapter, except where noted in Sections 40.440.010(B)(2) and 40.440.040(B).
- (b) Within designated habitat areas exempt activities are listed in Section 40.440.010(D). These do not require review.

Table 40.440.010-1 outlines exempt and reviewed activities. **Table 1** outlines relevant activities and review requirements.

Table 1: Relevant Exemptions in CCC Section 40.440.010(D); Table 40.440.010-1

Activity	Is a clearing review required?
Forest practices in habitat areas that are regulated by the Washington Department of Natural Resources under the Forest Practices Rules or regulated under Clark County Code Section 40.260.080, Forest Practices, except conversions or conversion option harvest plans.	Exempt
Emergency clearing to abate immediate danger to persons or property. For emergency clearing of hazard trees, remove only that portion of a hazard tree as is necessary to remediate the hazard. Cut wood should be left in the habitat area.	Exempt
Clearing necessary for the emergency repair of utility or public facilities; provided, that notification of emergency work that causes substantial degradation to functions and values is reported in a timely manner.	Exempt
Clearing for operation, maintenance or repair of existing utilities or public facilities that does not further increase the impact to, or encroach further within the habitat area.	Exempt
Clearing of defined nuisance vegetation in habitat areas which utilizes methods that minimize disturbance of soils and non-nuisance vegetation. Replanting with native vegetation should be pursued to prevent re-infestation.	Exempt
Clearing as minimally necessary for placement of fencing, private wells, septic systems or individual lot sewer, water, electrical or utility connections in habitat areas, where practical alternatives do not exist.	Exempt
Clearing as minimally necessary for routine road maintenance activities in habitat areas consistent with Regional Road Maintenance ESA Program Guidelines.	Exempt
Clearing as minimally necessary for surveying or testing in habitat areas.	Exempt



4.2 Wetland Areas (§40.450)

The following activities are exempt from wetland protection provisions in CCC §40.450.010(C). All exempted activities are required to use reasonable methods to avoid potential impacts to wetlands and buffers.

- b. The harvesting or normal maintenance of vegetation in a manner that is not injurious to the natural reproduction of such vegetation.
- d. The removal or eradication of noxious weeds so designated in Title 7 of this code or other exotic nuisance plants including non-native blackberries, provided that ground disturbing heavy machinery (scraping, ripping, etc.) is not used. Cutting, mowing, and ground disturbance with hand tools is allowed.
- f. Emergency clearing to abate immediate danger to persons or property. For emergency clearing of hazard trees, remove only that portion of the hazard tree as necessary to remediate the hazard.
- g. Clearing necessary for the emergency repair of utility or public facilities. Notification of emergency work that causes substantial degradation to functions and values must be reported in a timely manner.
- h. Clearing for operation, maintenance, or repair of existing utilities or public facilities that does not further increase the impact to, or encroach further within the wetland or wetland buffer.
- i. Forest practices in habitat areas that are regulated by the Washington Department of Natural Resources under the Forest Practices Rules or regulated under Clark County Code Section 40.260.080, Forest Practices, except conversions or conversion option harvest plans.
- j. Clearing as minimally necessary for placement of fencing, private wells, septic systems or individual lot sewer, water, electrical or utility connections in wetland buffers, where practical alternatives do not exist.
- n. Land disturbance in wetlands and wetland buffers cumulatively less than five (5) cubic yards in volume and three hundred (300) square feet in area, provided that the wetland hydroperiod is not significantly affected.



5. Scope of Activities

The habitat conservation and wetland protection ordinance of the code require that the plan include a description of the scope of activities within habitat areas, wetlands, wetland buffers, and other critical areas (CCC §40.440.040(A)(1)(a) and 40.450.040(K)(1)(a)).

The project description describes the types of activities that will occur at the site. Section 5.3 identifies these activities and any related mitigation measures.

The following provisions are stipulated and agreed to with this plan:

- The plan applies to all activities identified within it that are located within areas meeting the definition of a critical area, including fish and wildlife conservation areas, flood hazard areas, geologic hazard areas, and wetlands and their buffers, unless otherwise exempted by the provisions contained in CCC 40.010 through 40.450.
- The approval of this plan meets all requirements associated with programmatic permits as prescribed under Sections 40.440.040.A and 40.450.040.K, and, as such, the activities mitigated in compliance with this plan do not require submission and approval of separate habitat reviews, wetland permits or reviews, or other separate approvals for the duration of this plan.
- This plan applies to existing roads, trails, and fencelines throughout the site for its duration.
- For all activities identified within this plan, no mitigation will be required in addition to the mitigation identified herein.
- The provisions contained within this plan apply to Clark County Public Works and the BCRRT, their employees, contractors or sub-contractors.
- The Habitat Conservation and Wetland Protection ordinances specify a 5-year maximum duration of 5 years for programmatic permits, unless an annual performance-based re-authorization program is approved within the permit or a shorter duration is supported by the findings. This plan includes a program for re-authorization in compliance with CCC Chapters 40.440.040 and 40.450.040.

5.1 Duration and Reauthorization

The duration of the plan is 5 years from the effective date of permit approval. CCC permits the annual extension of the permit if the plan implantation and performance warrant.

Clark County Public Works would like to employ the annual extension option provided by the code and thereby extend the permit and plan beyond 5 years. The extensions would occur in 1-year increments. The annual extension program requires that Clark County Public Works take the following annual actions:

- Filing a written request with the County for the permit to be extended, and
- Submission of an annual report that identifies and describes any problems or incidents during the previous year, and any mitigation or other remedial actions that was necessary.



5.2 Geographic Area Covered

The habitat conservation and wetland protection sections of the code require the identification of the geographical area covered by the plan (Chapters 40.440.040 and 40.450.040). The attached Vicinity Map and Site Plan depict the location and extent of the project area.

5.2.1 Wetlands

Due to the safety issues surrounding the site, no wetland delineation has been completed. In general, wetland habitat at the site is located adjacent to stream channels and along the floodplain of Lacamas Creek. The County, using their Hydric Soils and Wetland Inventory GIS layers as mapped in the *Clark County Wetland Atlas* and/or *Environmental Constraints Atlas*, determined wetland locations at the site. Due to the low intensity nature of the land-use, it was determined that a 50-foot buffer for all wetlands would be appropriate.

5.2.2 Habitat

Due to the safety issues surrounding the site, no on-site habitat assessment was completed. In general, the habitat along the fence line is dense understory growth.

5.3 Activities Covered by Programmatic Permit and Plan

All categories of activities identified below will be executed in a manner that will minimize impacts to critical areas and their buffers identified on the property. All activities will attempt to avoid impacts that will degrade the functions and values of those critical areas. Where avoidance is not feasible, the impact will be minimized to the extent practicable and mitigation will be provided for any unavoidable impacts. The overarching goal of the plan is to allow for the proposed activities while ensuring that there is no net loss to critical areas functions and values and that the activities will meet the specific development standards in CCC Chapters 40.410 to 40.450. In addition, these activities will follow strict safety standards to ensure that the public health, safety, and welfare are protected.

The following activities are allowed within areas defined in CCC as critical areas in compliance with the provisions contained therein and the mitigation measures identified in this plan. All compensatory mitigation will occur on site.

5.3.1 Brush Clearance

A 10-foot wide access area will be cleared inside the entire length of the perimeter fence and the CITA fence. In addition, 20-feet will be cleared alongside all roads and trails present on the site (see Figure 2). During the initial clearance an UXO Technician will provide an area inspection prior to brush clearance to ensure MEC avoidance.

Mechanical clearance will employ equipment specifically designed for vegetation removal. Manual clearance will use chain saws, string trimmers, brush hogs, or other hand operated equipment to manually remove the vegetation. Manual clearance will be



used when the slope or terrain prohibits the use of mechanical equipment or if sensitive habitat areas are present.

Mitigation Measures

- Within identified critical areas trees with a diameter at breast height (dbh) greater than 4 inches will be retained.
- No mechanical equipment will enter wetlands or waterbodies.
- Mechanical equipment (e.g. brush hog) will be used within the 200-foot riparian buffer only when hand-clearance is not possible due to heavy presence of blackberries.
- Removal of non-native, invasive species.

5.3.2 Tree Pruning

Routine tree pruning activities within designated wetland and riparian areas and their associated buffers are not an exempt activity under the applicable code sections. Impacts to wetland and riparian areas associated with pruning activities include impacts to water quality (temperature) through the removal of shading canopies, or loss of large woody debris through vegetation removal.

The access area will be maintained to allow for fence inspection, repair, replacement, sign posting, and general maintenance activities.

Mitigation Measures

- Trees will be pruned only as necessary to maintain the 10-foot access area along fencelines and the 20-foot buffer on roads and trails.
- No mechanical equipment will enter wetlands or waterbodies.
- Within identified critical areas trees with a dbh greater than 4 inches will be retained.
- When practical, topping, limbing, pruning or girdling trees will occur instead of tree removal to minimize habitat impacts.
- Disposition of vegetation cuttings resulting from any work conducted within critical areas or their buffers shall be determined using the following hierarchy:
 - Cuttings will be left in place, unless they will create a fire hazard, a hazard to the road or fence, or leaving them would be unsightly.
 - Cuttings will be chipped and broadcast into adjacent habitat and/or riparian areas unless the volume is too large to be broadcast in the area, or if leaving them would be unsightly.
 - Cuttings will be removed from the habitat, wetland, buffer, or other critical area only neither of the two previous options is available or appropriate to the location.

5.3.3 Fence Repair, Restoration, and Maintenance

Damaged or missing fence will be repaired or replaced with new wire and posts as necessary to maintain site access controls. The majority of the fence is comprised of a 5-strand barb wire with metal posts. Portions of the western perimeter fence consist of 6-foot high chain link security fence. The repaired or restored fence will be ensured along the entire existing fence alignment.



Mitigation Measures

- No mechanical equipment will enter wetlands or waterbodies.
- The fence will be repaired, restored, and maintained within its existing footprint.

5.3.4 Vegetation Maintenance and Use of Chemicals

Vegetation maintenance and the use of pesticides, herbicides, fungicides, and fertilizers applied within 25 feet of any wetland or waterbody require mitigation in conformance with the habitat conservation and wetland protection code sections and in a manner that avoids and minimizes adverse impacts to water quality and aquatic resources.

Vegetation maintenance may occur with human-supported equipment and small walk-next-to equipment, such as backpack and handheld sprayers and wand applicators, non-motorized and motorized mowers, brush hogs, chain saws, string trimmers, axes, and machetes.

Mitigation Measures

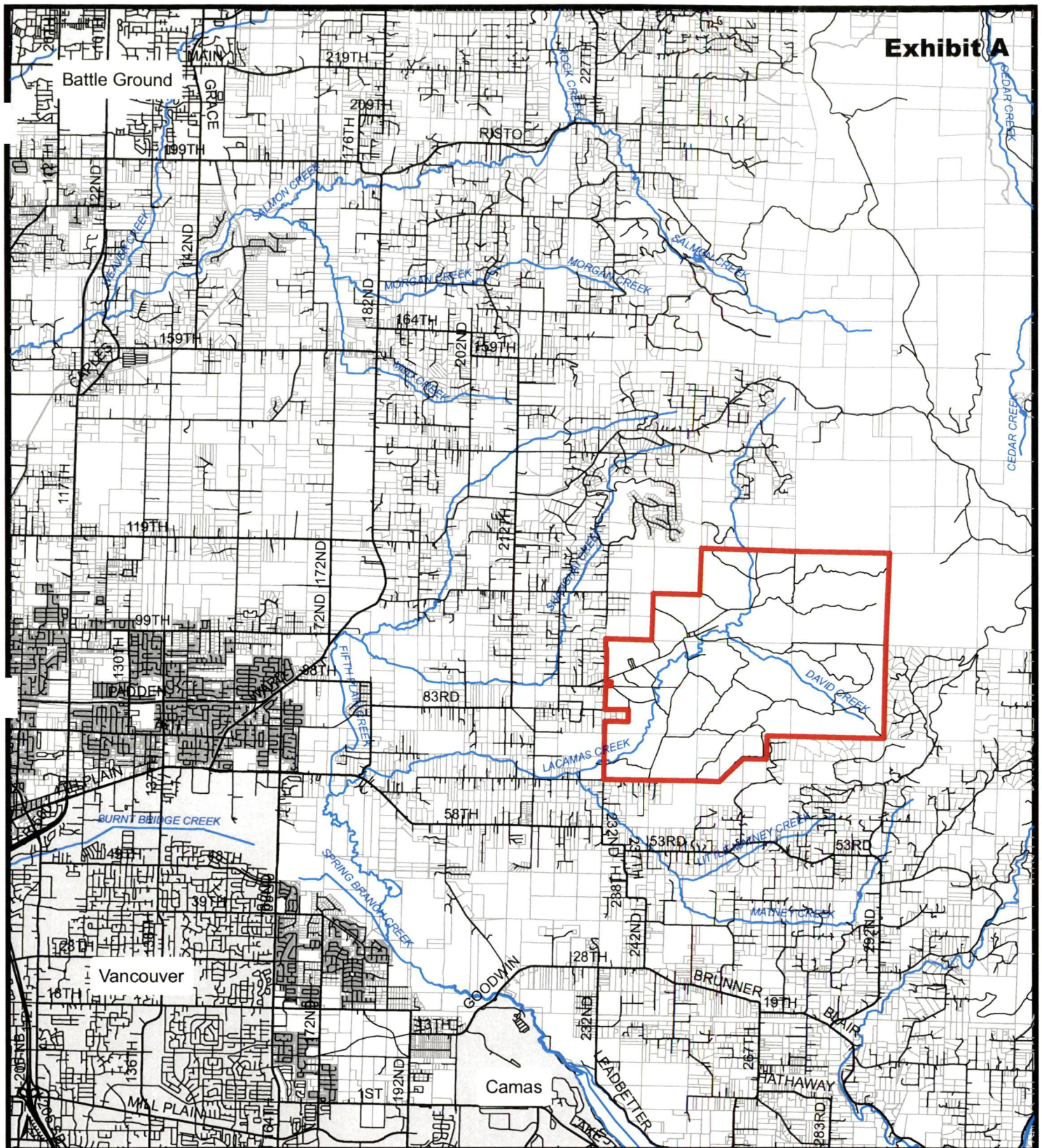
- Chemical application will be performed in accordance with Washington's applicator license law.
- Manual clearance methods will be used when the slope or terrain prohibits or if sensitive habitat areas are present.
- Removal of non-native, invasive species.

5.3.5 Limited Grading and Excavations

Providing that the wetland hydroperiod is not significantly affected and the grading is associated with repair and replacement of fences, limited grading and excavation work that displaces less than 5 cubic yards in volume and 300 square feet in area may occur within designated wetland and riparian areas and associated buffers.

Mitigation Measures

- Soil or other material displaced as a result of the fence repair or replacement will be removed from the sensitive area.
- Disturbed areas will be restored and/or replanted as appropriate.



Source: Clark County GIS (August 2006)

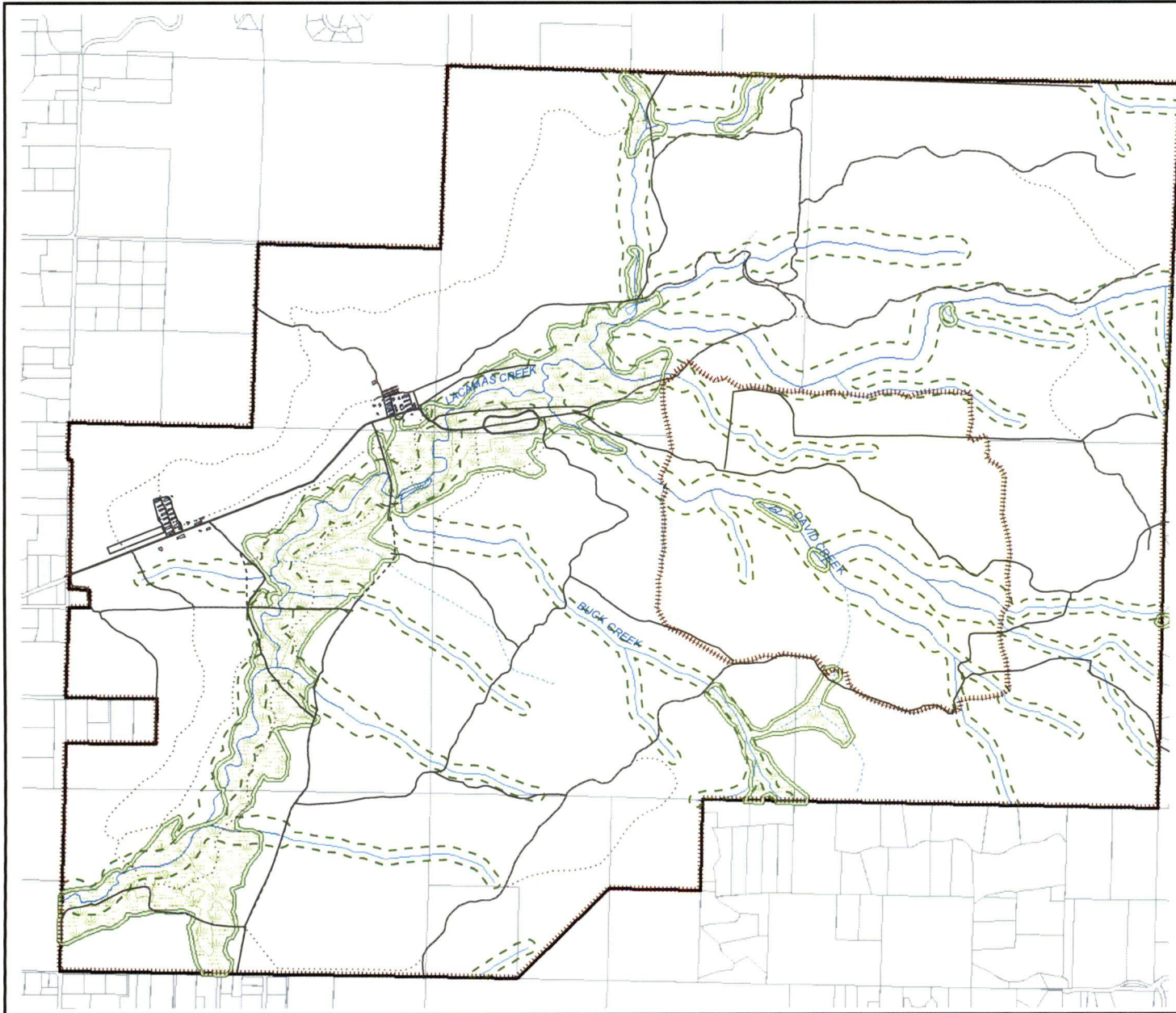


	Project #: 70489
	Date: November 2006

VICINITY MAP
Camp Bonneville
23201 NE Pluss Road
CLARK COUNTY, WASHINGTON

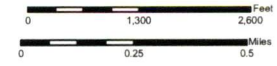


BONNEVILLE
CONSERVATION,
RESTORATION &
RENEWAL
TEAM, LLC



Legend

- Camp Bonneville
 - Central Impact Target Area
 - Paved Roads
 - Trails
 - Roads
 - Gravel Roads
 - Fenceline
 - Tax Lots
 - Wetland Areas
 - Wetland Buffer (50-ft)
 - Riparian Habitat
- Streams**
- Fish
 - Non-Fish
 - Unknown



Data Sources: Clark County GIS (August 2006); Wetland layer provided by Brent Davis, Wetland Biologist, Clark County; Camp Bonneville layers provided by Michael Baker Jr., Inc.

CAMP BONNEVILLE
23201 NE PLUSS ROAD
CLARK COUNTY, WASHINGTON

SITE PLAN
MAP
PROJECT: 70489.000
DATE: November 2006
FIGURE: 2



BONNEVILLE
CONSERVATION,
RESTORATION &
RENEWAL
TEAM, LLC

CAMP BONNEVILLE

23201 NE PLUSS ROAD

CLARK COUNTY, WASHINGTON

CLEARING

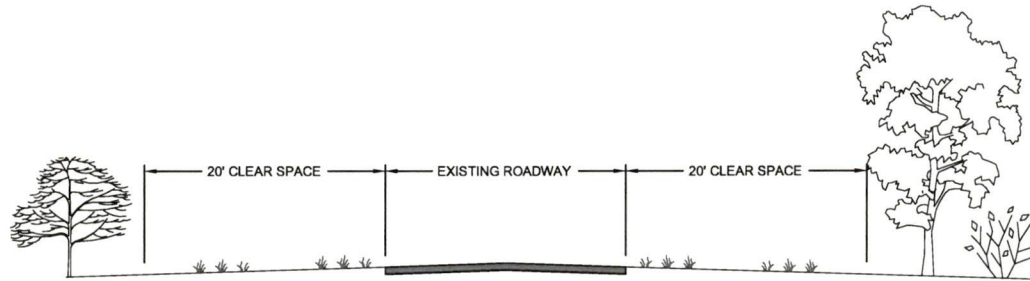
CROSS SECTIONS

PROJECT: 70489.000

DATE: NOVEMBER 2006

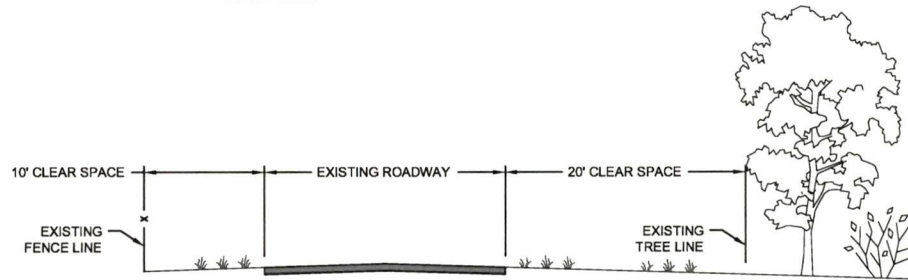
FIGURE:

3



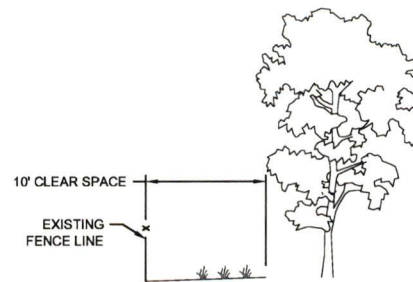
CROSS SECTION - ROADS AND TRAILS

SCALE: NONE



CROSS SECTION - ROADS AND TRAILS

SCALE: NONE



CROSS SECTION - FENCELINE

SCALE: NONE



ATTACHMENT B

DAILY REPORTS



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work CBCRT, Vancouver, WA	10/30/2006 Monday	001 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Briefing
- 0730 Team operated along the perimeter clearing vegetation 10ft from the fence. Equipment shortages have been identified and are being filled. Safety officer started filing system and recording site information about daily safety brief's, vehicle inspection, employee certifications
- 1300 Meeting with Baker: Comments made from Mike Gage & Mark Knight found below
- 1330 Billy Moses met with representatives from PBS to take GPS positions on air evacuation point & muster point
Primary: Point A - Parade Ground, Secondary: Point B - Main Gate, Third: Point C - Land fill 4
Main Muster Point: Main Gate, Alternate Muster Point: South Gate
- 1530 United Rentals on-site to service chipper having problems continuing to run
- 1710 Team returned from field. Team cleared 1100 ft. of vegetation

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

1300 Meeting with Baker: Comments from Mike Gage & Mark Knight
 Don't leave chipper piles
 Only go to 6 inches from the surface. Leave vegetation for erosion control
 Make sure we go 10 ft from the fence
 Areas where vegetation was completely removed, cover with chipper material
 Weed eat along fence interior side

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

10/30/2006

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work CBCRT, Vancouver, WA	10/31/2006 Tuesday	002 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety meeting
- 0730 Team returned to field to continue vegetation removal on perimeter fence
- 1300 Safety met with Mark Knight Communications provider to discuss radio options.
Safety took the vendor out to range 4 and Camp Bonneville to look at possible sites for repeater placement.
It was decided that the current antenna would be able to be used in the main Camp Kilpatrick site.
The vendor expects to be able to supply equipment within 2 weeks
- 1330 Billy Moses attended a meeting with a Clark County Construction Inspector. It was attended by Mike Gage and Mark knight. They toured the site and explained the work to be performed.
- 1715 Teams returned from the field. The crew cleared 2550 feet of vegetation 10 feet from the fence.
Vegetation cleared to-date: 3650 ft

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

PIKA QC REPRESENTATIVE Date

Lloyd W. Hear

PIKA Site Supervisor Date 10/31/2006



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work CBCRT, Vancouver, WA	11/1/2006 Wednesday	003 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- 0900 Ford F 250's right front tire got a flat
- 0915 Fred Hammer departed site for Environmental Physical
- 1015 Suxos and Safety surveyed ahead of the brush team. I was determined to move the Bobcat to a different location
- 1200 Lloyd departed to the Stihl dealership to get replacement parts and to purchase more items for the jobsite.
- 1200 Lloyd departed to the Stihl dealership to get replacement parts and to purchase more items for the jobsite.
- 1400 Billy had a Project Status meeting with Mark Night, Mike Gage, Washington State Department of Ecology and a Clark County Representative.
- 1410 The Bobcat brushcutting attachment broke
- 1715 Team returned from the field. Team cleared 1950' of vegetation.
- Vegetation cleared to-date: 5600 ft

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

11/1/2006

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work CBCRT, Vancouver, WA	11/2/2006 Thursday	004 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
 - 0725 Brush Clearing team in the field
 - 1300 Took Mike Gage for a field trip and showed the operations
 - 1600 Conducted an inspection of the field team's vehicles and safety gear
 - 1700 Conducted a "Lessons Learned" discussion to find out where we could perform better and safer in the field.
 - 1715 Team returned from the field. Team cleared 4590 ft of vegetation.
- Vegetation cleared to-date: 10,190 ft

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

_____ 11/2/2006
 PIKA QC REPRESENTATIVE Date PIKA Site Supervisor Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work CBCRT, Vancouver, WA	11/6/2006 Monday	005 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
 - 0725 Brush Clearing team in the field
 - 1320 Rhino not running well. Seems to be just idling and does not work like normal. Billy fixed it.
 - 1400 Pick-up truck stuck while turning around. Had to be towed out with other pick-up truck
 - Five inches of rain through out the day limited access to potential work areas.
 - 1715 Team returned from the field. Team cleared 4330 ft of vegetation.
- Vegetation cleared to-date: 14,520 ft

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

PIKA QC REPRESENTATIVE Date

Lloyd W. Heagy

PIKA Site Supervisor Date

11/6/2006



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/7/2006 Tuesday	006 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief (Bill Pelky from Baker attended the safety briefing)
- 0725 Brush Clearing team in the field
- 1600 Broke the blade on the Bobcat while clearing vegetation. Replaced the broken blade with the spare blade and continued field operations. Making arrangements to procure some spare blades.
- 1715 Team returned from the field. Team cleared 4540 ft of vegetation. (850ft North, 3690ft South)
- Vegetation cleared to-date: 19060 ft
- Significant rainfall limited access between the west and east side of the facility to one bridge.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning and informed about the need for erosion control

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

11/7/2006

Date



PIKA International, Inc.

DAILY REPORT

CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/9/2006 Thursday	008 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- 1530 Team returned from the field. Team cleared 4000ft of vegetation. (ft 1600North,ft 2400South)
Vegetation cleared to-date: 26810 ft (6.15 acres)
- 1600 Mike Gage offered meth amphaetamine manufacturing hazards and recognition techniques training to all the site personnel.
- 1700 Office desks from Sacramento,CA arrived. Unloaded all the desks & chairs and stockpiled them in the office.
- On 11/10/06 Billy Moses had a site walk with the fencing crew. Showed them around the fence perimeter where vegetation had been cleared. They intend to start fencing the perimeter on 11/13/06.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning.

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

11/9/2006
Date



PIKA International, Inc.

DAILY REPORT

CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
0	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/8/2006 Wednesday	007 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief (Bill Pelky from Baker attended the safety briefing)
 - 0725 Brush Clearing team in the field
 - 1400 Lightning spotted in the area and site shutdown for half hour. After restart, rain along hail storm in the area
 - Significant rainfall limited access to several areas along the perimeter of the reservation. Had to identify new areas where work could be performed in a safe manner.
 - Frank Ronosonet slip and fell down while walking on one of the rough terrains. He strained his thigh muscles. He was immediately brought back to the office, given enough rest and an incident report prepared.
 - One of the pick-up trucks (Chevy) had a flat tire which is ruined. The truck is temporarily fixed with a spare tire. Noted that all the tires on the truck are in bad condition and needs to be replaced immediately.
 - 1715 Team returned from the field. Team cleared 3750 ft of vegetation. (1100ft North, 2650ft South)
- Vegetation cleared to-date: 22810 ft (5.23 acres)

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning and informed about the need for erosion control. He informed that they would place straw bails at few places where they have identified erosion of soil due to steady rains.

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

11/8/2006
Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/13/2006 Monday	009 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Rains over the weekend prevented safe field operations in several areas. Steep incline terrains and muddy soil conditions made it inaccessible to certain areas of the perimeter fence. Had to identify areas where safe operations can be performed.
- Met with Mike Gage from BCRRT and personnel from Sterling Communications regarding the installation of T1 Internet connection and phone lines at MKM office. All the phone lines & Internet will be activated next week.
- 1530 Team returned from the field. Team cleared 1000ft of vegetation. (1000ft North)
Vegetation cleared to-date: 27810 ft (6.38 acres)
- Had an incident with PIKA rental F-250 pick-up truck (United Rentals) when Pat Gorman slid and hit a pole while driving on a steep terrain. The truck was partially dented on the right front fender. An incident report is being prepared and sent to Drew Bryson. The ground was muddy & tires on truck have highway tread on them.
- Had a near miss, when the Rhino rolled over on the driver side while driving it on a rough and steep terrain. No one was injured in this incident.
- One of the blades on the bobcat was damaged during the vegetation clearance operations. Steps are being taken to secure a replacement blade.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning.
Clif Gray on-site to meet Baker, BCRRT and in assisting with preparing of the Workplan and ESS.

PIKA QC REPRESENTATIVE Date

Lloyd W. Hear

PIKA Site Supervisor Date 11/13/2006



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/14/2006 Tuesday	010 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Brush clearance crews encountered heavy vegetation near the creeks and in the areas where work is being performed. Certain areas could not be reached even with a Bobcat due to steep mountain terrains and wet soil conditions.
- Heads on the three brush cutters were damaged and broken. Pull chord on a chain saw snapped. Arrangements are being made to secure some new parts for these tools. Lack of spare parts in local dealerships will cause some delays.
- 1530 Team returned from the field. Team cleared 1400ft of vegetation. (1400 ft. North)
- Vegetation cleared to-date: 28210 ft (6.47 acres)

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning.
Clif Gray & Erik Stoffel on-site to assist in project coordination.

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

11/14/2006

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/16/2006 Thursday	012 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Steep terrains and dense vegetation caused field work to be slowed down in order to perform safe operations.
- A heavy volume of dead wood and trees were blocking the road over a 100 foot span of road and had to be cut & removed to make way for the vegetation clearance crew to perform their duties.
- Brush cutters are experiencing breakdowns and the team had 2 out of 4 to use today.
- 1700 Crew arrived from field and completed 1170 Linear feet.
- Total vegetation cleared is 32,680 linear feet or 7.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Bill Pelky from Baker attended the safety briefing in the morning.

Clif Gray & Erik Stoffel on-site to assist in project coordination.

PIKA QC REPRESENTATIVE Date

Lloyd W. Hear

PIKA Site Supervisor Date

11/16/2006



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/28/2006 Tuesday	013 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- About 2 inches of snow on the ground and in the mountains slowed field operations.
- Lloyd took Mark Knight around the southern perimeter fence to give a tour of the completed work and show him the rough terrains we are encountering. He was satisfied with the work completed so far.
- Received clarification from Mark Knight on level of effort for brush clearance around the perimeter fence.
- Received clarification from Clif Gray to start vegetation clearance on the roads & trails in addition to perimeter fence
- 1700 Crew arrived from field and completed 4380 linear feet of vegetation clearance along the fence perimeter. (1080 ft North Side & 3300 ft South Side)
- Total vegetation cleared is 38129 linear feet or 8.76 acres.
- Comments received from WA Ecology regarding Interim Action Work Plan (IAWP).
Modified IAWP to include the firing ranges and remove references to vegetation clearance. IAWP is due on Monday.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Clif Gray on-site to aid is project support activities

_____ Date
 PIKA QC REPRESENTATIVE


 _____ Date
 PIKA Site Supervisor

11/28/2006



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/29/2006 Wednesday	014 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Started clearing vegetation on the roads and trails on the south side of the military reservation.
- Billy Moses & Lloyd George took Mark Knight, Mike Gage, Ben Forson, Greg Johnson for the tour of the jobsite to show the work completed along the perimeter fence (both north side and south side)
- Clif Gray discussed details with WA department of Ecology about the IAWP, ESS and other project deliverables.
- Clif Gray coordinated with Baker personnel on GIS information.
- 1700 Crew arrived from field and completed 2280 linear feet on the north side of the reservation.
Cleared 1 acre of vegetation on the Roads & Trails on the south side of the reservation
- Total vegetation cleared on the fenced perimeter is 40409 linear feet or 9.29 acres.
- Total vegetation cleared on the roads & trails is 1 acre.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Clif Gray on-site to aid is project support activities

11/29/2006

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	11/30/2006 Thursday	015 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Sрни Neralla on-site to discuss project progress with Baker Personnel. He was taken around the jobsite to provide a tour of the work completed and the challenges field crews are encountering.
- Lloyd & Damon looked around the areas near the fence perimeter where Bobcat could be used. But for not able to locate any such areas and as such Bobcat had to be taken off service for vegetation clearance.
- 1700 Crew arrived from field and completed 1300 linear feet on the north side & 300 on south side of the reservatic Cleared 0.5 acre of vegetation on the Roads & Trails on the south side of the reservation
- Total vegetation cleared on the fenced perimeter is 42209 linear feet or 9.70 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Clif Gray on-site to aid is project support activities
 Sрни Neralla on-site to have project related discussions with Mark Knight from Baker Inc.

11/30/2006

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

Date



PIKA International, Inc.

DAILY REPORT


CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	12/1/2006 Friday	016 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Returned F-250 pickup truck to United Rentals.
- 1700 Crew arrived from field and completed 1316 ft on the south side & 500 ft on east side of the reservation
- Total vegetation cleared on the fenced perimeter is 44025 linear feet or 10.12 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

PIKA QC REPRESENTATIVE Date



PIKA Site Supervisor 12/1/2006
Date

CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	12/4/2006 Monday	017 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Vegetation clearance team started working on clearing vegetation on the CITA fence.
- 1700 Crew arrived from field and completed 700 ft on the south side & 1700 ft on east side of the perimeter fence.
- The crew also cleared 900 ft. vegetation along the CITA fence.
- Total vegetation cleared on the fenced perimeter is 46,425 LF or 10.67 acres.
- Total vegetation cleared on the CITA fence is 900 LF & 0.2 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Clif Gray & Erik Stoffel on-site for weekly meeting with Baker regarding the project status updates and discuss project deliverables.

PIKA QC REPRESENTATIVE Date

Lloyd W. Pearson

PIKA Site Supervisor

12/4/2006

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	12/5/2006 Tuesday	018 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Continued vegetation clearance along the outer side of the CITA fence.
- Continued vegetation clearance along the inner side of the perimeter fence.
- Provided PIKA President Terry Kasnavia a site tour for familiarization and evaluation of work completed.
- Provided a site tour of the work completed to BCCRT personnel and Clark County personnel (Jerry Barnett & Bart Arther) They were satisfied with work completed to-date.
- 1700 Crew arrived from field and completed 950 ft on the east side of the perimeter fence.
- The crew cleared 1000 LF (along east side) & 1200 LF(along west side) of vegetation along the CITA fence.
- Total vegetation cleared along the fenced perimeter is 47,375 LF or 10.89acres.
- Total vegetation cleared along the CITA fence is 3100 LF & 0.71 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Clif Gray & Erik Stoffel on-site for weekly meeting with Baker regarding the project status updates and discuss project deliverables.

Srini Neralla, Jim Putnam and Terry Kasnavia on-site to discuss project progress with client and site familiarization.

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

12/5/2006
Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	12/6/2006 Wednesday	019 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Continued vegetation clearance along the outer side of the CITA fence.
- Continued vegetation clearance along the inner side of the perimeter fence.
- Provided Jim Putnam a site tour for familiarization and evaluation of work completed.
- 1700 Crew arrived from field and completed 970 ft on the east side of the perimeter fence.
- The crew cleared 1000 LF (along north side) & 1100 LF(along east side) of vegetation along the CITA fence.
- Total vegetation cleared along the fenced perimeter is 48,345 LF or 11.10 acres.
- Total vegetation cleared along the CITA fence is 5200 LF or 1.19 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Erik Stoffel on-site to evaluate and discuss project status and resolve any operational issues.
 Drew Bryson on-site to evaluate and supervise field operations from a safety perspective.

PIKA QC REPRESENTATIVE

Date

PIKA Site Supervisor

12/6/2006

Date



CONTRACT NUMBER	TITLE AND LOCATION	DATE	Report No.
05-35-0032-PIKA-110906	CB Remediation & Reclamation Work BCRRT, Vancouver, WA	12/7/2006 Thursday	020 PAGE 2

DETAILED DESCRIPTION OF ACTIVITIES:

- 0700 Safety Brief
- 0725 Brush Clearing team in the field
- Continued vegetation clearance along the outer side of the CITA fence.
- Continued vegetation clearance along the inner side of the perimeter fence.
- Provided Jim Putnam a site tour for familiarization and evaluation of work completed.
- 1700 Crew arrived from field and completed 400 LF (along the east side) & 970 LF (along the south side) of the perimeter fence.
- The crew cleared 2310 LF (along north side) of vegetation along the CITA fence.
- Total vegetation cleared along the fenced perimeter is 49,715 LF or 11.41 acres.
- Total vegetation cleared along the CITA fence is 7510 LF or 1.72 acres.
- Total vegetation cleared on the roads & trails is 1.5 acres.

REMARKS (Include directions received from client's representative, visitors, compliance notices received; pertinent information)

Drew Bryson on-site to evaluate and supervise field operations from a safety perspective.
Drew Bryson given tours of the field operations to familiarize with site conditions and identify any safety issues.

PIKA QC REPRESENTATIVE Date

PIKA Site Supervisor Date

12/7/2006