

CLARK COUNTY STAFF REPORT

DEPARTMENT: Public Works/Camp Bonneville

DATE: September 26, 2017

REQUESTED ACTION: Authorize Chair to sign Modification 8 to the Environmental Services Cooperative Agreement to increase funding by \$7,180,606.

Consent Hearing County Manager

BACKGROUND

This request provides for continuation of the Washington State Department of Ecology-mandated cleanup at Camp Bonneville. Specifically, this modification increases funding by \$7,180,606 to remediate 100 acres surrounding former hard targets in the Central Impact Target Area at Camp Bonneville. Additionally, the Central Impact Target Area will be expanded by approximately 100 acres, and a new access road constructed.

COUNCIL POLICY IMPLICATIONS

This project has no council policy implications.

ADMINISTRATIVE POLICY IMPLICATIONS

This project has no administrative policy implications.

COMMUNITY OUTREACH

None.

BUDGET IMPLICATIONS

YES	NO	
X		Action falls within existing budget capacity.
	X	Action falls within existing budget capacity but requires a change of purpose within existing appropriation
	X	Additional budget capacity is necessary and will be requested at the next supplemental. If YES, please complete the budget impact statement. If YES, this action will be referred to the county council with a recommendation from the county manager.

BUDGET DETAILS

Local Fund Dollar Amount	\$0
Grant Fund Dollar Amount	\$7,180,606
Account	1013
Company Name	

PW17-108

DISTRIBUTION:

Board staff will post all staff reports to The Grid. <http://www.clark.wa.gov/thegrid/>


Attachments: Environmental Services Cooperative Agreement W912DY-11-2-0337

Jerry Barnett, PE
Project Manager, Public Works



Heath H. Henderson, PE
Public Works Director/County Engineer

Primary Staff Contact: Jerry Barnett, (360) 566-6992


APPROVED: _____
CLARK COUNTY, WASHINGTON
BOARD OF COUNTY COUNCILORS

DATE: 9/26/17

SR# 194-17



APPROVED: _____
Jim Rumpeltes, Interim County Manager

DATE: _____

COOPERATIVE AGREEMENT MODIFICATION

MODIFICATION NO: P00008
EFFECTIVE DATE: 21 September 2017

AGREEMENT NO: W912DY-11-2-0337
PR NO: W31RYO-7257-8856

This is a **bilateral** modification (supplemental agreement) reflecting other agreements of the parties, modifying the terms and conditions of the Cooperative Agreement. The Recipient **is required** to execute and return one copy of this modification to the Grants Officer.

DESCRIPTION OF MODIFICATION

The purpose of this modification is to effect mutually agreed changes to the Cooperative Agreement, pursuant to the amendment of Title 10, United States Code §2701(d), as enacted by the National Defense Authorization Act.

--- SEE CONTINUATION PAGE(S) ---

ACCOUNTING AND APPROPRIATION DATA:

097 NA X 2017 0516 000 60D1 CCS: NA A0 2017 08 8130 6MC80007000 0110 2540 FD6H3L C8959G
INCREASE \$7,180,606.00

EXECUTION OF MODIFICATION

FOR THE RECIPIENT:

Clark County
Public Works
P.O. Box 9810
Vancouver, WA 98666-9810



Marc Boldt
(SIGNATURE)

Marc Boldt
(NAME)

Bacc Chair
(TITLE)

9/26/17
(DATE)

Approved as to form only:

By: Christina Howe
Deputy Prosecuting Attorney

FOR THE UNITED STATES OF AMERICA:

U.S. Army Corps of Engineers, Huntsville Center
ATTN: CEHNC-CTB/Sharon Butler
5021 Bradford Drive
Huntsville, AL 35805

BUTLER.SHARON.H.1230746970
N.H.1230746970

Digitally signed by BUTLER.SHARON.H.1230746970
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=USA, cn=BUTLER.SHARON.H.1230746970
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(SIGNATURE)

SHARON H. BUTLER
(NAME)

GRANTS OFFICER
(TITLE)

21 September 2017
(DATE)

A. The purpose of this Environmental Services Cooperative Agreement (“ESCA”) Modification is to realign funds as follows:

- 1) **Section B, Paragraph 5.1** – Amend the Cooperative Agreement by adding funding in the amount of \$7,180,606.00. Increasing the maximum obligation from \$21,516,530.00 to \$28,697,136.00.
- 2) **Section B, Paragraph 5.2** – New funding Contract Line Item Number (CLIN) 005, RAU 3 Phase 3 (Central Impact Target Areas (CITA) and Northern CITA Expansion) is added to this Cooperative Agreement. See attached scope of work.
- 3) **Section B, Paragraph 5.2.1** The added funded Contract Line Item Number (CLIN) 005, RAU 3 Phase 3 (Central Impact Target Areas (CITA) and Northern CITA Expansion) is added to Table 1 below:

TABLE 1 – CAMP BONNEVILL MEC ESCA CLINS				
CLIN	DESCRIPTION	PERIOD OF PERFORMANCE	MAXIMUM OBLIGATION	AMOUNT FUNDED
001	Environmental Services Central Valley Floor and Associated Wetlands	Aug 2011 - July 2021	\$15,696,885	\$15,696,885
002	Environmental Services – Western Slopes Pilot Study	Aug 2011 - July 2021	\$905,000	\$905,000
003	Option 1 – Additional Cleanup Funding Line Item	Aug 2011 - July 2021	\$597,700	\$597,700
004	RAU 3 Phase 2	May 2015 - July 2021	\$4,839,645	\$4,839,645
005	RAU 3 Phase 3 (Central Impact Target Areas(CITA) and CITA Expansion)	Sept 2017 - July 2021	\$7,180,606	\$7,180,606
TOTAL OBLIGATION			\$28,697,136	\$28,697,136

- 4) **Section B, Paragraph 11** Revise Paragraph 11 to update the Financial Report Distribution and Correspondence Table, see revised table below:

ADDRESSEE	ADDRESS	REPORTS & CORRESPONDENCE	ORIGINAL & COPIES
Grants Officer	U.S. Army Engineering & Support Center ATTN: CEHNC-CTB (Sharon Butler) 5021 Bradford Drive Huntsville, AL 35805 E-mail: Sharon.H.Butler@usace.army.mil	SF 270 SF 425 (Quarterly/Final) Written Correspondence affecting performance and/or proposed changes by Recipient Quarterly Performance Reports	Original Original Original Original

Army Environmental Representative	Thomas Lederle DA, ACSIM (DAIM-ODB) 2530 Crystal Drive Arlington, VA 22202 E-mail: thomas.e.lederle.civ@mail.mil	SF 270 SF 425 (Quarterly/Final) Written Correspondence affecting performance and/or proposed changes by Recipient PERFORMANCE REPORTS	1 Copy 1 Copy 1 Copy 1 Copy
CEHNC Program Manager	U.S. Army Engineering & Support Center ATTN: CEHNC-EMM (John Nebelsick) 4910 University Square Suite 2 Huntsville, AL 35816 E-mail: John.d.nebelsick@usace.army.mil	SF 270 SF 425 (Quarterly/Final) Written Correspondence affecting performance and/or proposed changes by Recipient Quarterly Performance Reports	1 Copy 1 Copy 1 Copy 1 Copy
BEC	Scott Armstrong CALIBRE Systems, Inc. E-mail: Scott.Armstrong@calibresys.com	SF 270 SF 425 (Quarterly/Final) Written Correspondence affecting performance and/or proposed changes by Recipient Quarterly Performance Reports	1 Copy 1 Copy 1 Copy 1 Copy
Army BRAC Division Program Manager	Andy Van Dyke, DA, ACSIM (DAIM-ODB) 2530 Crystal Drive Arlington, VA 22202 E-mail: andrew.l.vandyke.civ@mail.mil	SF 270 SF 425 (Quarterly/Final) Written Correspondence affecting performance and/or proposed changes by Recipient Quarterly Performance Reports	1 Copy 1 Copy 1 Copy 1 Copy

- 5) **Section B, Paragraph 15** Revise paragraph 15 – Government and Recipient Representatives Tables as listed below:

NAME	TITLE	OFFICE & EMAIL	PHONE
Sharon Butler	Grants Officer	U.S. Army Engineering & Support Center ATTN: CEHNC-CTB (Butler) 5021 Bradford Drive Huntsville, AL 35505 E-mail: Sharon.H.Butler@usace.army.mil	PH: (256) 895-1440
John Nebelsick	ESCA Program Manager	Environmental & Munitions Center of Expertise 4910 University Square Suite 2 Huntsville, AL 35816 E-mail: John.d.nebelsick@usace.army.mil	PH: (256) 895-1795
Andy Van Dyke	Army BRAC Division Program Manager	DA, ACSIM (DAIM-ODB) 2530 Crystal Drive Arlington, VA 22202 E-mail: andrew.l.vandyke.civ@mail.mil	PH: (703) 545-2452
Scott Armstrong	BEC	Scott Armstrong CALIBRE Systems, Inc. 4880 Finlandia Way Carmichael, CA 95608 E-mail: Scott.Armstrong@calibresys.com	PH: (916) 261-4577
Recipient: Clark County Public Works	Clark County Administrator	Clark County Public Works P.O. Box 9810 Vancouver, WA 98666-9810	PH:

- 6) **Section C, Revise Paragraph 4.3.6.1. as follows:**

- e. Within the boundary of the Central Impact Target Area (CITA) the recipient is responsible for conducting surface clearance (0 inches below ground surface [bgs]) for 100 percent of a 100-acre polygon that shall encompass the 15 identified targets and previous MEC findings within the CITA. In the event that any MEC items are recovered from a boundary grid, the clearance area shall be expanded by adding a new 100 ft. x 100 ft. grid extending outward from that grid, not to exceed 10 acres. The main CITA road shall be brush cut and subsurface clearance performed to a depth of 14 inches bgs. Along the Northern CITA Boundary, a subsurface clearance to 14 inches bgs shall be performed to install an external perimeter road along with a 5-strand barbed-wire fence with warning signage every 50 feet. (See appendix 1, Key Assumptions and Task Descriptions.)
- f. The Recipient will be reimbursed for its performance of surface Step-Out Clearance, calculated as described above, through the Additional Cleanup Funding Line Item described in Section B.5.2. If these costs exceed the Additional Required Cleanup Funding, the Parties agree to amend this Agreement for the purpose of providing the Recipient the additional funding pursuant to C.4.3.6.1 necessary to achieve Task Completion.
- g. The Recipient shall seek WDOE's approval of the Pilot Study Area and proposed evaluation as outlined in the TSRS. If the Recipient obtains WDOE approval, then it will perform the pilot study as outlined in the TSRS even if the costs exceed the amount funded by the Army.

- 7) **Section E, Attachment E.1, Paragraph 2.1.3 (1) (d) revise to read:**

Army Regulation 385-64, U.S. Army Explosive Safety Program, 1 Feb 2000.

8) Section E, Attachment E.1, Paragraph 2.1.3 (3) Revise to read:

Clark County shall submit any required explosives safety plans (e.g. ESS) to the Department of the Army Base Realignment and Closure (BRAC) Division (ODB) for submission to the U.S. Army Technical Center for Explosives Safety (USATCES). **DDESB approval must be obtained prior to conducting any munitions response actions.**

9) Attachment E.1 –Technical Specifications and Requirements Statement: Replace the existing Performance Specifications – Table 2 Munitions Response Table with the following:

<u>Site Description and Designation</u>	<u>Munitions Response Summary</u>
<p>Institutional Controls (ICs) – consists of those site-wide activities specified in the PPCD and/or ESCA, and required to establish and maintain the institutional controls that are an integral part of the remedy</p>	<p><u>Additional Document Submittals</u></p> <ul style="list-style-type: none"> • Long-Term Site-Wide Operations, Maintenance, and Monitoring Plan (Draft and Final) • Annual Compliance Report <p><u>Ongoing Actions</u></p> <ul style="list-style-type: none"> • Maintain all LTM and ICs in perpetuity. • Fence Replacement and Repair (Site Perimeter and CITA) and Sign Replacement as needed • Site Security • Enforcement of Long-Term Institutional Control in accordance with WDOE CAP. • UXO Technician training for selected County personnel as needed
<p>Site-Wide Activities – consists of activities which have site-wide application and/or support actions impacting more than one RAU</p>	<p><u>Document Submittals</u></p> <ul style="list-style-type: none"> • Site-Wide Health and Safety Plan, update as necessary • Project Management Plans, update as necessary • Monthly Project Progress Reports <p><u>Actions</u></p> <ul style="list-style-type: none"> • Complete Public Participation Requirements and Associated Community Relations as needed • Maintain Project Repositories
<p>Remedial Action Unit 3 (RAU 3) consists of any area at the Property where military munitions may be present. RAU 3 is identified and illustrated in Exhibit F of the PPCD. Initial clearance actions delineated more munitions than originally expected leading to a breakout of work in the RAU 3 CAP into specific phases.</p> <p>Phase One will include the remediation of the Central Valley Floor and Associated Wetlands as shown in Appendix 2—ACES Map and will constitute the “CVFAW.”</p>	<p><u>Document Submittals</u></p> <ul style="list-style-type: none"> • Work Plan for CVFAW • Compliance Monitoring Plan • Explosives Safety Submittals for the CVFAW • MEC After Action Report for the CVFAW • MEC Findings Report for the CVFAW • Long-Term Operations and Maintenance Plan • Notice of Completion for the CVFAW <p><u>Actions</u></p> <ul style="list-style-type: none"> • Complete AAR and Achieve Task Completion for CVFAW. • Maintain all LTM and ICs requirements for CVFAW. • Demilitarization Processing for Materials Presenting Potential Explosives Hazard for CVFAW

<p align="center"><u>Site Description and Designation</u></p>	<p align="center"><u>Munitions Response Summary</u></p>
	<ul style="list-style-type: none"> • Subsurface MEC clearance to 14” BGS of the central valley floor, per WDOE CAP for RAU 3, including Demolition Area 3. • Subsurface MEC clearance to 14” BGS of the wetlands, per wetland protocols in WDOE CAP for RAU 3. <p>The following actions will be completed upon the Army providing additional funding in accordance with ESCA Section C.4.3.6.1:</p> <ul style="list-style-type: none"> • Step-Out Clearance: If WDOE requires step-outs in accordance with the procedures outlined in the PPCD beyond the boundary of the CVFAW (see Appendix 2—ACES Map), complete the required step-outs at the specified unit cost per acre.
<p>Western Slopes Area Pilot Study</p>	<p><u>Document Submittals</u></p> <ul style="list-style-type: none"> • Pilot Study Work Plan for innovated MEC cleanup technologies/approaches on a maximum of 50 acres adjacent to the Central Valley Floor and extending into the Western Slopes Area. • If work plan approved by WDOE, After Action Report with rough order of magnitude cost estimate and delineation of preferred cleanup technology/approach for Western Slopes Area.
<p>Remedial Action Unit 3 (RAU 3) consists of any area at the Property where military munitions may be present. RAU 3 is identified and illustrated in Exhibit F of the PPCD. Initial clearance actions delineated more munitions than originally expected leading to a breakout of work in the RAU 3 CAP into specific phases.</p> <p>Phase Two will include the remediation of approximately 125 acres on varying parts of the installation including: Landfill 4 Demolition Area 1 & 2; Former Training Ranges (Hand Grenade Range, 3.5 inch rocket range & Rifle Grenade Range); and Former Firing Positions (Artillery Position 1-4 and 7 & Mortar Positions 1, 2, and 4-6)</p>	<p><u>Additional Document Submittals</u></p> <ul style="list-style-type: none"> • Work Plan for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, and Rifle Grenade Range and Former Firing Positions. • Compliance Monitoring Plan • MEC After Action Reports for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, and Rifle Grenade Range and Former Firing Positions. • MEC Findings Report for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, and Rifle Grenade Range and Former Firing Positions. • Long-Term Operations and Maintenance Plan • Notice of Completion for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, and Rifle Grenade Range and Former Firing Positions. <p><u>Actions</u></p> <ul style="list-style-type: none"> • MEC Surface Clearance of expanded Landfill Area 4 – Demolition Area 1. • MEC Surface Clearance of Demolition Area 2. • MEC Surface Clearance of 3.5-Inch Rocket Range. • MEC Surface Clearance of hand grenade Range. • MEC Surface Clearance of rifle grenade Range. • Subsurface clearance of the Former Firing Positions.

<u>Site Description and Designation</u>	<u>Munitions Response Summary</u>
	<ul style="list-style-type: none"> • Achieve Task Completion for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, Rifle Grenade Range, and Former Firing Positions. • Maintain all LTM and ICs requirements for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, Rifle Grenade Range, and Former Firing Positions. • Demilitarization Processing for Materials Presenting Potential Explosives Hazard for Landfill Area 4/Demolition Area 1, Demolition Area 2, Hand Grenade Range, 3.5 inch rocket range, Rifle Grenade Range, and Former Firing Positions.
<p>Remedial Action Unit 3 (RAU 3) consists of any area at the Property where military munitions may be present. RAU 3 is identified and illustrated in Exhibit F of the PPCD. Initial clearance actions delineated more munitions than originally expected leading to a breakout of work in the RAU 3 CAP into specific phases.</p> <p>Phase Three will include expansion of the boundary of the Central Impact Target Area (CITA) and surface of a 100-acre polygon that shall encompass the 15 identified targets and previous MEC findings within the CITA. The main CITA road shall be brush cut and subsurface clearance performed to a depth of 14 inches bgs. Along the Northern CITA Boundary, a subsurface clearance to 14 inches bgs shall be performed to install an external perimeter road along with a 5-strand barbed-wire fence</p>	<p><u>Additional Document Submittals</u></p> <ul style="list-style-type: none"> • Work Plan for Phase 3 CITA and CITA expansion. • Compliance Monitoring Plan • MEC After Action Reports for Phase 3 CITA and CITA expansion • MEC Findings Report for Phase 3 CITA and CITA expansion • Long-Term Operations and Maintenance Plan • Notice of Completion for Phase 3 CITA and CITA expansion <p><u>Actions</u></p> <ul style="list-style-type: none"> • MEC surface Clearance of 100 acre area around the target sites and previous MEC findings in the CITA • MEC Construction Support for remaining road and fence work in the CITA • MEC subsurface clearance of the main CITA road and new perimeter road adjacent to the CITA expansion. • Installation of fencing and signage to support the CITA expansion as outlined in Land Use Controls (LUC) agreement for the installation • Achieve Task Completion for Phase 3 CITA and CITA expansion • Maintain all LTM and ICs requirements for Phase 3 CITA and CITA expansion • Demilitarization Processing for Materials Presenting Potential Explosives Hazard for Phase 3 CITA and CITA expansion

* Documents which will be prepared and submitted to the Washington Department of Ecology only if determined to be required pursuant to the Washington Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC) or the PPCD.

**RIP, RC, and LTM are terms used for the Defense Environmental Restoration Program, definitions provided below.

1) **Attachment E.1 –Technical Specifications and Requirements Statement:** Replace the existing Performance Specifications – **Table 3 Future Munitions Response Table** with the following:

<u>Site Description and Designation</u>	<u>Future Munitions Response Activities that are Not Yet Funded</u>
<p>Site-Wide Activities – consists of activities which have site-wide application and/or support actions impacting more than one RAU</p>	<p><u>Actions</u></p> <ul style="list-style-type: none"> • Prepare educational materials • Maintenance of sitewide ICs. • Fence replacement and ongoing repairs (Site Perimeter and CITA) and sign replacement • Maintain site security • UXO Technician training for selected County personnel as needed
<p>Remedial Action Unit 3 (RAU 3) consists of any area at the Property where military munitions may be present. RAU 3 is identified and illustrated in Exhibit F of the PPCD. Future phase(s) will include all remaining work in Western Slopes Area, and other locations as described in the WDOE CAP for RAU 3.</p>	<p><u>Additional Document Submittals</u></p> <ul style="list-style-type: none"> • Work Plan for Park Reuse Construction Area, and Western Slopes Area. • Compliance Monitoring Plan • MEC After Action Reports for Park Reuse Construction Area, and Western Slopes Area • MEC Findings Report for RAU 3 • Long-Term Operations and Maintenance Plan • Notice of Completion Park Reuse Construction Area, and Western Slopes Area. • Notice of Completion for RAU 3 <p><u>Actions</u></p> <ul style="list-style-type: none"> • MEC Surface Clearance of the Dense Vegetation – Moderate Slope Area north and west of the Valley Floor, Western Slopes • MEC Subsurface Clearance to 4 Feet in the Park Reuse Construction Area • MEC Subsurface Clearance to 14 Inches in the Park Reuse Construction Area • MEC Construction Support for Fuels Management • Achieve Task Completion for Park Reuse Construction Area and Western Slopes Area. • Maintain all LTM and ICs requirements for Park Reuse Construction Area, and Western Slopes Area. • Demilitarization Processing for Materials Presenting Potential Explosives Hazard for Park Reuse Construction Area and the Western Slopes Area

* Documents which will be prepared and submitted to the Washington Department of Ecology only if determined to be required pursuant to the Washington Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC) or the PPCD.

**RIP, RC, and LTM are terms used for the Defense Environmental Restoration Program, definitions provided below

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Appendix 1
Key Assumptions and Task Descriptions

CAMP BONNEVILLE REMEDIAL ACTION WITHIN THE CITA AND NORTHERN CITA EXPANSION

KEY ASSUMPTIONS AND TASK DESCRIPTIONS

Key assumptions and tasks to perform remedial actions for the Central Impact Target Area (CITA) and Northern CITA Expansion (both included in RAU 3). As described in the Final RAU 3 Cleanup Action Plan (CAP), the CITA comprises roughly 465 acres and the Northern CITA Expansion includes an additional 107 acres north of the CITA boundary. Accessibility of the CITA and Northern CITA is limited and the terrain is steep with dense vegetation. Munitions found to date include fired and armed/fuzed 60mm, 81mm, 4.2 inch mortars, 105mm, and 155mm projectiles.

The CITA cleanup action shall include surface clearance (0 inches below ground surface [bgs]) using a Schonstedt for 100 percent of a 100-acre polygon that shall encompass 15 identified target areas and previous MEC findings within the CITA. In the event that any of the items described below are recovered from a boundary grid, the following step-out criteria shall be utilized for step-out surface clearance grids (0 inches bgs):

- 1.) If a MEC item is found within a boundary grid of a designated clearance area, then the clearance area shall be expanded by adding a new (100 ft x100ft) grid extending outwards from the found item.
- 2.) If a MPPEH item is found in a boundary grid of a designated clearance area, then the clearance area shall be expanded by adding a new (100ft x100ft) grid extending outwards from the found item.
- 3.) The new grid shall be surface swept and brush cut.
- 4.) The new grid shall be surface cleared to 0 inches bgs.

The following exceptions shall stop/modify the step-out procedures:

- 1.) If the new grid extends beyond the property perimeter fence line.
- 2.) If the new grid extends to an adjacent cleanup area requiring clearance or a previously cleared area.
- 3.) If worker safety is compromised due to extremely steep terrain making the area inaccessible.

A 5-strand barbed-wire fence with warning signage every 50 feet, and external access road, shall be installed along the perimeter of the Northern CITA Expansion boundary (approximately 6,900 linear feet). The access road easement shall be 40 feet wide, consisting of a 10 foot wide surface clearance (0 inches bgs) inside the fence alignment, 10 foot wide subsurface (0 to 14 inches bgs) within the roadway alignment located just outside the fenceline, and a 20 feet wide surface clearance (0 inches bgs) outside the roadway alignment. In addition, the CITA Road within the boundary of the CITA (approximately 6,800 linear feet) shall require subsurface clearance to 14 inches bgs and width of approximately 10 feet. Crushed rock shall be added to the Northern CITA perimeter roadway alignment (approximately 6,900 linear feet, 10 feet wide); no crushed rock shall be added to the CITA road.

A work plan and amended ESS shall be prepared for the work. Results from the CITA and Northern CITA Expansion remedial action shall be summarized and incorporated into an After Action Report.

KEY ASSUMPTIONS

Key assumptions are summarized below.

- The CITA removal action shall include surface clearance to 0 inches bgs using Schonstedt metal detectors for 100 percent of a 100-acre polygon that shall encompass the 15 identified target areas and previous MEC findings. An option item shall provide for surface clearance step-outs for MEC and MPPEH items in boundary grids only.
- The Main CITA Road footprint within the CITA boundary is approximately 2.0 acres. The Main CITA Road shall be manually brush cut with UXO escort, and cleared to 14 inches bgs using the Minelab F3 detector. The cleared road can then be utilized as a staging area for the workers to enter the sub-grids within the polygon.

- In the event that any of the items described below are recovered from a boundary grid, the following step-out criteria shall be utilized.
 - For step-out grids, if a MEC item is found within a boundary grid of a designated clearance area, then the clearance area shall be expanded by adding a new (100ft x100ft) grid extending outwards from the found item.
 - For step-out grids, if a MPPEH item is found in a boundary grid of a designated clearance area, then the clearance area shall be expanded by adding a new (100ft x100ft.) grid extending outwards from the found item.
- A perimeter fence and access road shall be installed along the boundary of the Northern CITA Expansion (approximately 6,900 linear feet). The road alignment shall be on the outside of the fence. A 40 feet wide easement shall undergo manual brush cutting (6,900 *40/43560 = 6.4 acres) with UXO escort. The County shall provide for removal of large trees (greater than 6 inch diameter). Weston shall provide tree stump removal and subsurface clearance to 14 inches bgs shall then be performed within a 10 foot wide footprint for the road (1.6 acres subsurface clearance) using the F3 Minelab all-metals detector, and surface clearance (0 inches bgs) of 10 feet inside the road/fence alignment and 20 feet outside of the road (4.8 acres surface clearance) using a Schonstedt detector. The fence shall be four feet in height with five strands of barbed wire and warning signage every 50 feet. Up to 6 inches of crushed rock shall be placed along the road footprint to provide all-weather access for UTVs and light pickup trucks.
- The Northern CITA Expansion perimeter road shall require crossing of the Eastern Fork Lacamas Creek at three locations. Culverts of appropriate size shall be installed (no bridges). Appropriate geotechnical and/or structural analysis shall be performed along with permitting support.
- Production rate assumptions:
 - Vegetation cutting support—two UXO II Techs to accompany each veg cutting crew; 0.5 acres/day/team
 - Subsurface clear of roads—0.4 grids/day/6-person team
 - Surface clear of 100-acre CITA area and Northern CITA perimeter road buffer—1.5 grids/day/6-person team
 - Surface clear CITA area step-out—2 grids/day/6-person team

- A Work Plan shall be prepared to describe the work. A separate ESS amendment shall be prepared for the CITA and Northern CITA Expansion. Existing natural resource protection and storm water pollution prevention measures shall apply.
- Tree removal greater than 6-inches in diameter within the target and step-out areas is not anticipated and is not included in this scope of work.
- Anomaly detection and removal within these areas shall then follow all other existing protocols for the CVFAW other than QC/QA failure criteria as described below in Section 9.
- A one-time mobilization/demobilization is included for the combined remedial action within the CITA and Northern CITA Expansion.
- Initial Draft, Draft, and Final versions of an After Action Report shall be prepared to describe the field work and results for remedial action within the CITA and Northern CITA Expansion.
- Mutually agreeable terms and conditions shall be established for the work.
- The scope does not include clearance or construction of a hiking trail north of the Lower DNR. No other roads within the CITA or the North CITA Expansion shall be cleared or improved other than as described above.
- Any changes requested that are beyond the scope of work, task descriptions, and key assumptions are subject to an equitable adjustment for cost and period of performance and shall be mutually negotiated and agreed upon in writing prior to performance of scope change.

TASK DESCRIPTIONS

Brief descriptions of required tasks and approach are listed below. A detailed listing of resources and cost break-down by task is provided on the enclosed cost proposal spreadsheet.

1 PERMITS, WORK PLANS, AND ALL OTHER FEDERAL, STATE, LOCAL AND TRIBAL GOVERNMENT REQUIREMENTS

This task includes the preparation of a Work Plan and revision to the ESS. The existing Central Valley Floor and Wetland (CVFAW) environmental protection and archeological resource

protection requirements shall be maintained during the work. The bond cost for the target area clearance and perimeter road and fencing scope (excluding the step-out option) is also included in this task.

2 LOCATION SURVEYING, MAPPING AND GIS PLAN

A licensed land surveyor, accompanied by a UXO escort, shall survey and flag the corners of the 100-acre surface clearance area within the CITA as well as the alignment of the Northern CITA Expansion boundary fenceline (approximately 6,900 linear feet) and boundaries 10 feet within and 30 feet outside of the fence alignment.

3 SITE FACILITIES, ACCESS AND CONTRACTOR OFFICE AND SHOP BUILDINGS

Existing field office support facilities shall be utilized to support the work. Miscellaneous equipment shall be provided for the duration of the work, and temporary facilities such as portalets and erosion control BMPs shall also be provided.

4 SURFACE SWEEP (100 ACRES)

UXO personnel shall escort the brush cutting crews as described in Task 5.

5 VEGETATION REMOVAL (100 ACRES)

Each brush cutting crew shall be provided with two UXO escorts consistent with the existing CVFAW Work Plan, SOP-1. The escorts shall inspect the area ahead of the brush cutters who shall be using manual methods. Mechanized equipment shall be allowed to remove deadfall or other cut vegetation but shall follow surface cleared paths. Deadfall litter shall be removed to locations outside the target area and vegetation cut to approximately six inches within the 100-acre area to facilitate clearance. Trees greater than six-inches in diameter shall remain. It is assumed that deadfall may be placed in nearby cleared areas and not hauled offsite.

6 SURFACE CLEARANCE (100 ACRES)

Anomaly detection using Schonstedt metal detectors and investigation of anomalies shall be performed by UXO technicians in accordance with the existing protocols for the CVFAW other than QC/QA failure criteria as described in Section 9. The 100-acre area within the CITA shall

be surface cleared (0 inches bgs). In the event that a step-out is required, notification shall be provided to Clark County for direction.

7 MEC AND MD DISPOSAL

MEC and munitions debris shall be disposed and certified in accordance with existing CVFAW protocols.

8 FENCE AND ROAD INSTALLATION SEQUENCE

- a) Vegetation Removal with UXO escort of the 8.4 acres of roads (North CITA Perimeter easement, 40 ft wide; Main CITA Road, 12.5 ft wide).
- b) Subsurface Clearance - North CITA Perimeter Road (10 ft wide road footprint) and Main CITA Road (12.5 ft wide) – total of 3.6 acres. Anomaly detection using Minelab F3 metal detectors and investigation of anomalies shall be performed by UXO technicians in accordance with the existing protocols for the CVFAW other than QC/QA failure criteria as described in Section 9.
- c) Surface Clearance - North CITA Perimeter (10 ft inside the road and 20 ft wide outside) – total of 4.8 acres. Surface clearance (0 inches bgs) shall be performed using ferrous metal Schonstedt detectors.
- d) Fence (5 Strand Barbed Wire – 4 ft high) – approximately 6,900 linear feet). Warning signs shall be placed on the fencing every 50 linear feet
- e) Three stream crossings using culverts including design/permitting support. Road alignment shall be adjusted slightly to accommodate culverts.
- f) Grading and rock installation on North CITA Perimeter road only (6-inches crushed rock, with filter fabric as needed for bridging over wet soils)
- g) All heavy equipment shall be cleaned and demobilized.

9 QUALITY CONTROL

Quality control measures and failure criteria for the surface MEC clearance shall be conducted in accordance with the letter from Department of Ecology dated January 4th 2017 (as described below). WDOE and Clark County shall perform QC in one of every 5 sub- grids in each payment unit.

Quality control measures and failure criteria for surface and subsurface MEC clearance shall be based on the following criteria:

1. One or more MEC item => 37mm projectile remaining in a grid.

2. One or more inert blind seeded item or one or more whole munitions debris (MD) item equal to or larger in size than a 37 mm projectile remaining in a grid.
3. Five (5) or more metal items or munitions debris (MD) fragments ranging in size from 5.16 in² up to 20 in² remaining in a grid.
4. One (1) or more metal item or MD fragment equal to or greater than 20 in² remaining in a grid.

10 DISCLOSURE

No cost impacts are associated with the requirement to not publically disclose data. It is assumed that any discussion of planning and/or results shall take place at the regularly scheduled monthly status meetings held for the CVFAW work.

11 AFTER ACTION REPORT

This task includes home office and field personnel effort to prepare a site-specific After Action Report. Draft, Draft Final, and Final versions shall be submitted (6 paper copies each). The draft report shall be submitted within 30 days after completion of field work.

12 STEP-OUT GRIDS

Surface clearance (0 inches bgs) of up to 10 acres of step-outs adjacent to the CITA clearance area is included in the scope as an option. Additional surveying, vegetation removal with UXO escort, surface clearance, disposal of MEC and munitions debris, and reporting are included in this task. Quality control measures and failure criteria for surface MEC clearance shall be as described in Section 9. It is assumed that the stepout area clearance, if awarded, shall be performed sequentially or concurrently with the target area clearance, therefore a separate mobilization/demobilization is not included for the stepout clearance activities.

A separate bond(s) shall be provided when field work begins for the step-out clearance (Task 12).

13 SCHEDULE

The field work shall begin within 30 days of Final Work Plan approval by WDOE. Field work shall be performed as described above followed by preparation of the After Action Report and Technical Information Report. The anticipated duration of field work for the base scope activities

(CITA 100-acre polygon and roads) is 13 months, with an additional 6 months to prepare and obtain approval for the after action report. Option 1 would add an additional 2 months of field work Results from the step-out area shall be incorporated into the after action report for the 100-acre clearance area.