9-386

V O L U M E I

HUMAN FACTORS APPLICATIONS, INC.
EXPLOSIVE ORDNANCE DISPOSAL DIVISION

UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION

TOOELE ARMY DEPOT FINAL REPORT

CONTRACT NUMBER:	DACA87-92-D-0133
DELIVERY ORDER:	007 & 010
CLIENT NAME:	U.S. Army Corps of Engineers
PRIME CONTRACTOR:	Human Factors Applications, Inc.
PROJECT TITLE:	Tooele Army Depot Unexploded Ordnance Removal Action
PROJECT LOCATION:	Tooele, Utah

December 15, 1994

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EXECUTIVE SUMMARY

Human Factors Applications, Inc. (HFA) under contract DACA87-92-D-0133 to the U.S. Army Corps of Engineers, Huntsville Division (CEHND) was issued two delivery orders for Ordnance and Explosive Waste (OEW) removal at specific sites on Tooele Army Depot-North Post (TEAD-N) and South Post (TEAD-S), Tooele, Utah. Delivery Order (DO) #07 was issued on July 7, 1993 for the location, removal and disposal of OEW outside the perimeter fence at the southwest corner of TEAD-N (Figure 1-1). DO #10 was issued on August 10, 1993 for similar work outside the southern boundary at TEAD-S (Figure 2-1).

The objective of both delivery orders was to locate, remove to depth of three feet, and dispose of all ordnance and explosive waste (OEW), OEW related material, and non-OEW related scrap. All UXO determined safe to move was to be turned over to TEAD Demolitions personnel for disposal. All OEW determined unsafe to move was to be detonated in-place by HFA.

HFA mobilized on September 20, 1993 under the concept of clearing TEAD-N and then moving immediately to TEAD-S. The clearance operation at TEAD-N proceeded in accordance with the Work and Accident Prevention Plans. During the clearance of TEAD-N, additional OEW contamination was discovered beyond the western boundary of Area B (Figure 1-1). TEAD-N under the initial Scope of Work was completed on November 17, and HFA began laying out the TEAD-S clearance site on November 18. Due to the onset of winter, HFA was directed to demobilize on November 23, prior to physically beginning search operations.

Clearance of TEAD-S resumed on May 16, 1994 under a modified Scope of Work. Under this modification, HFA conducted a surface clearance of an expanded area based on the continued discovery of OEW outside the designated clearance areas. TEAD-S was completed on June 6, 1994. Under modified DO #07, HFA shifted its work force to TEAD-N to clear new areas identified during the original clearance operation. A total of 5228 UXO items were destroyed and 18,000 pounds of scrap were recovered at TEAD-N. Sixteen UXO items were recovered and disposed of at TEAD-S.

TOOELE ARMY DEPOT
FINAL REPORT

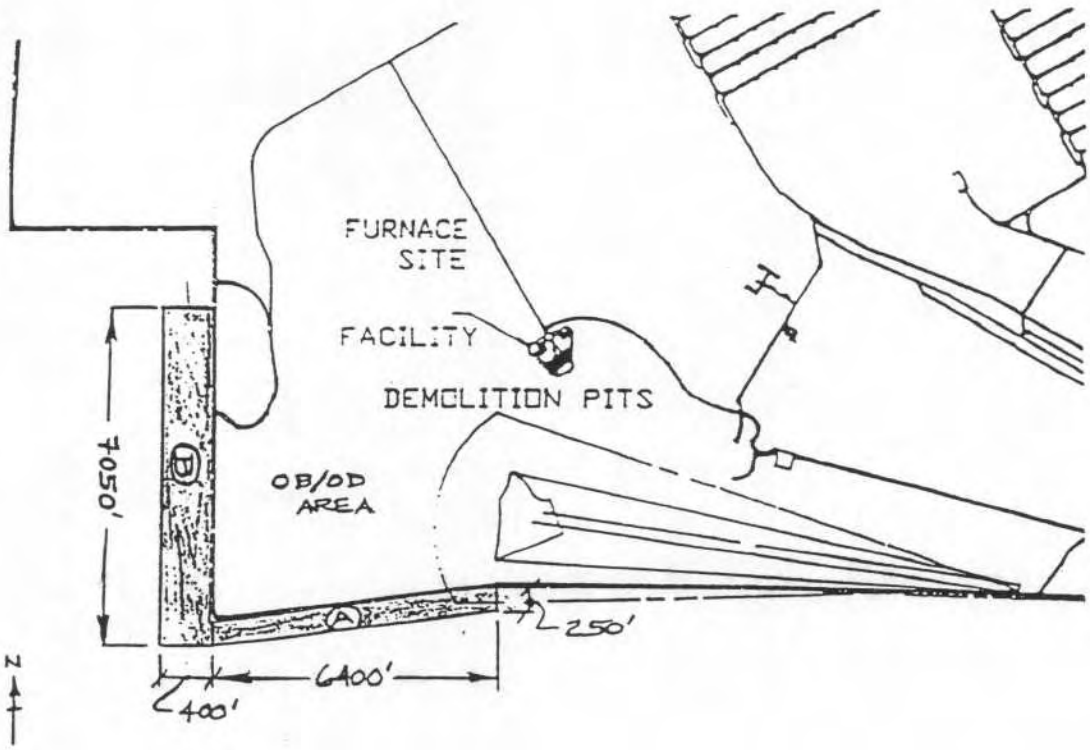
CHAPTER ONE
20 Sept 1993 to 23 Nov 1993

1 INTRODUCTION

1.1 The Explosive Ordnance Division of Human Factors Applications Inc. was contracted by the U. S. Army Corps of Engineers, Huntsville Division (CEHND), for projects "West of the Mississippi River". Delivery Orders #07 and #10 were issued under contract DACA87-92-D-0133 to perform UXO and OEW scrap removal actions at both the North and South posts of the Tooele Army Depot (TEAD), Tooele, Utah. Delivery Order #07, with nine modifications, [see Appendix A] provided for the surface and subsurface survey, location, removal and disposal of OEW, OEW related scrap as well as non-OEW scrap outside of and adjacent to the southwest corner of TEAD-N (see Figure 1-1). Delivery Order #10, with seven modifications, [see Appendix B] also provided for the surface and subsurface survey, location and removal and disposal of all OEW, OEW scrap and non-OEW scrap, in an area adjacent to the southern boundary fence of TEAD-S (see Figure 1-2). Due to the onset of winter storms, Delivery Order #10 was not completely executed and HFA personnel demobilized on November 23, 1993.

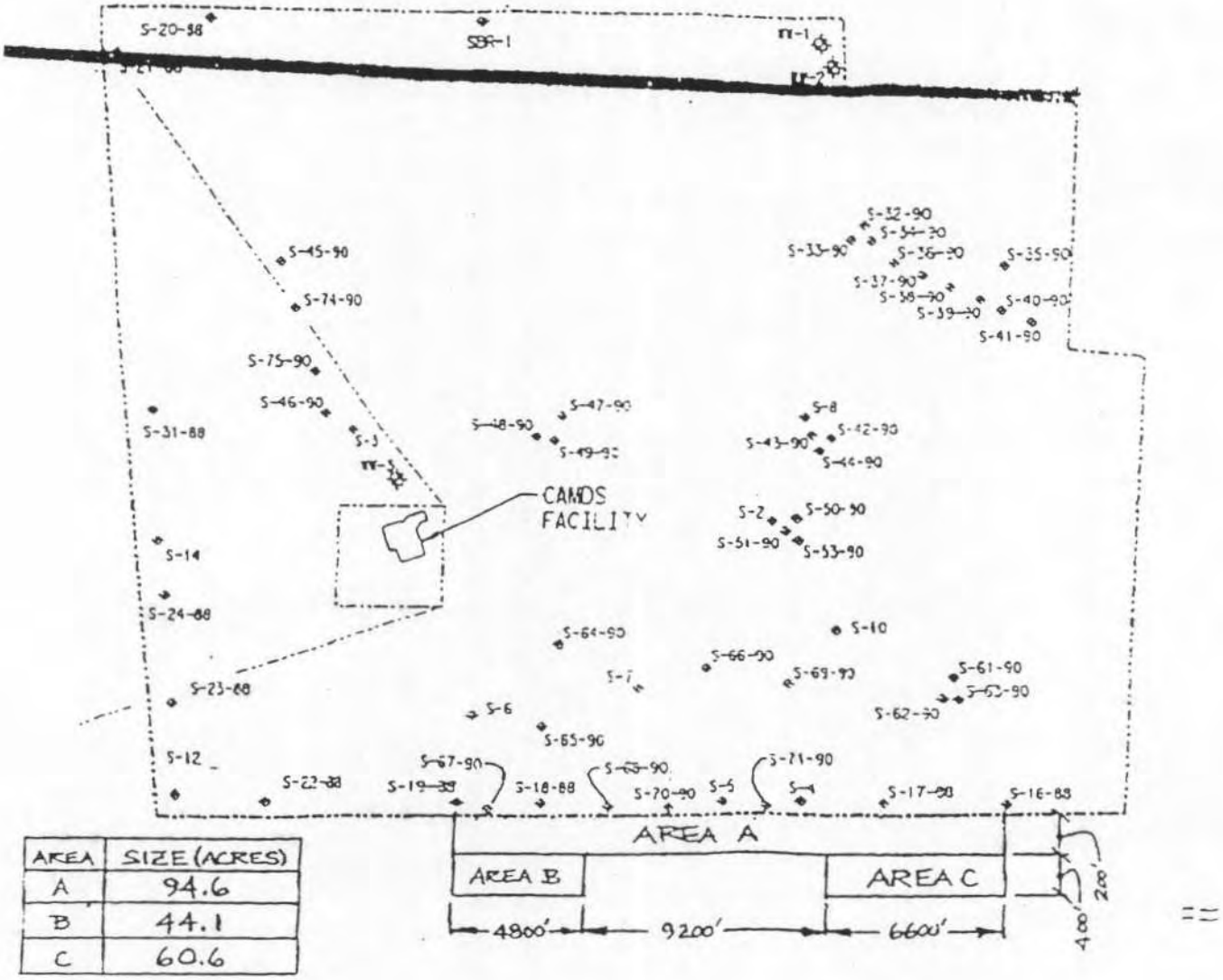
1.2 During the TEAD-N project, OEW contamination was discovered outside of the established western boundary of the site. Modification 3 to DO #07 extended the boundaries to include this area and it was designated as Area C (see Figure 1-3). Additional OEW contamination was still observed beyond the extended boundaries of Area C. Surveys by the CEHND Safety Specialist and HFA's Senior UXO Supervisor (SUXOS) confirmed the presence of OEW and subsurface anomalies continuing for 1000 feet or more beyond Area C. The original Scope of Work was complete. Because of the weather and the additional OEW contamination discovered in the TEAD-N Area, CEHND deferred further clearance operations until the spring of 1994. This report covers both phases of the TEAD project; Chapter One will report the results of the first phase (clearance of TEAD-N), and Chapter Two will provide the results of the second phase (TEAD-S and TEAD-N) of OEW removal operations.

FIGURE 1-1



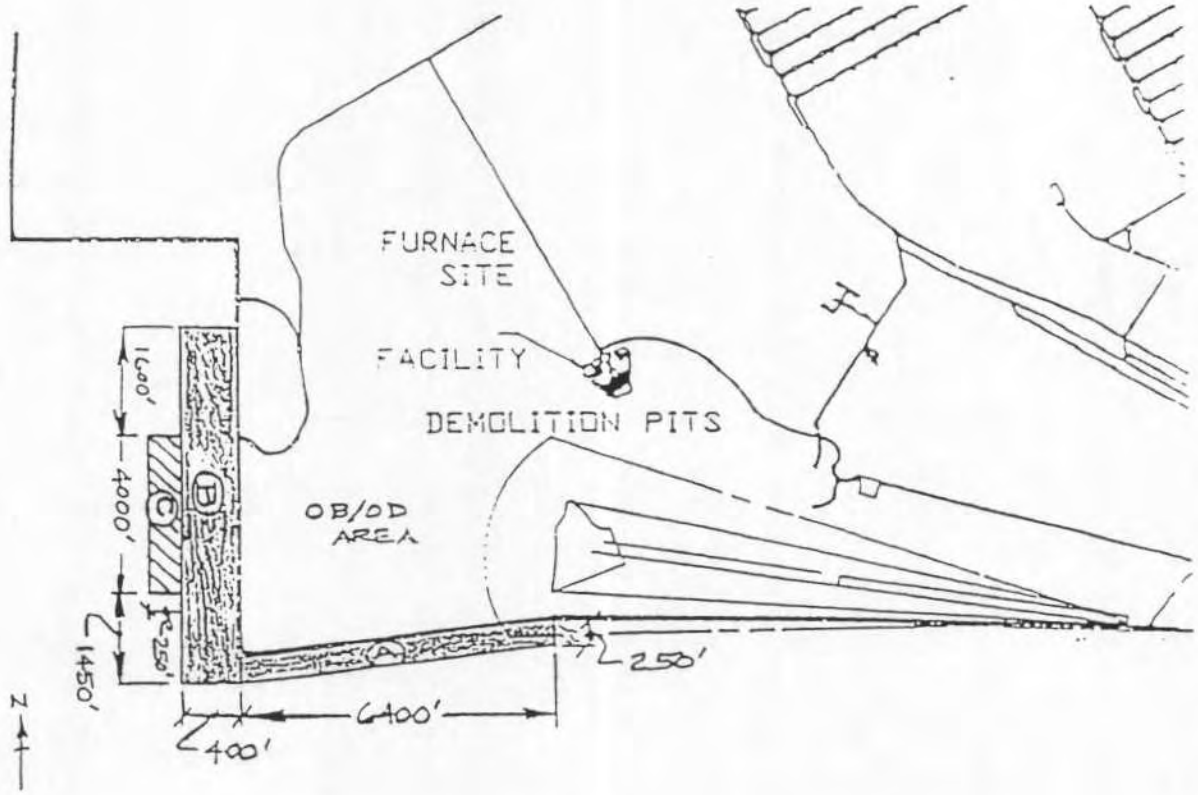
TOOELE ARMY DEPOT
SW CORNER
NTS

FIGURE 1-2



AREA	SIZE (ACRES)
A	94.6
B	44.1
C	60.6

FIGURE 1-3



TOOBLE ARMY DEPOT - NORTH
SW CORNER
NTS

2 DISCUSSION

2.1 Tooele Army Depot - North Post

2.1.1 TEAD-N is located in northwest Utah, approximately 35 miles west southwest of Salt Lake City, Utah. TEAD-N was established in 1942 and has been one of the major ammunition storage and equipment maintenance centers for the U.S. Army. The current mission of TEAD is to receive, store, issue, maintain, and dispose of munitions.

2.1.2 The original site consisted of two areas located adjacent to the southwest corner of TEAD-N (see Figure 1-1). Area A is 250 feet wide and 6,400 feet long, and runs generally east to west along the southern boundary fence of the post. Area B is 400 feet wide and runs north to south for 7,050 feet along the western boundary fence. Modification 3 to the basic Delivery Order created Area C, which is an additional 400 feet wide and runs north to south for 4,000 feet (see Figure 1-3). Subsequent modifications expanded Area D to 600 feet, added Area E, and expanded the area westward another 1,000 feet (see Figure 1-4). Areas A, B, and C were completed under the first phase of the project and Area D was finished during the next phase along with TEAD-S.

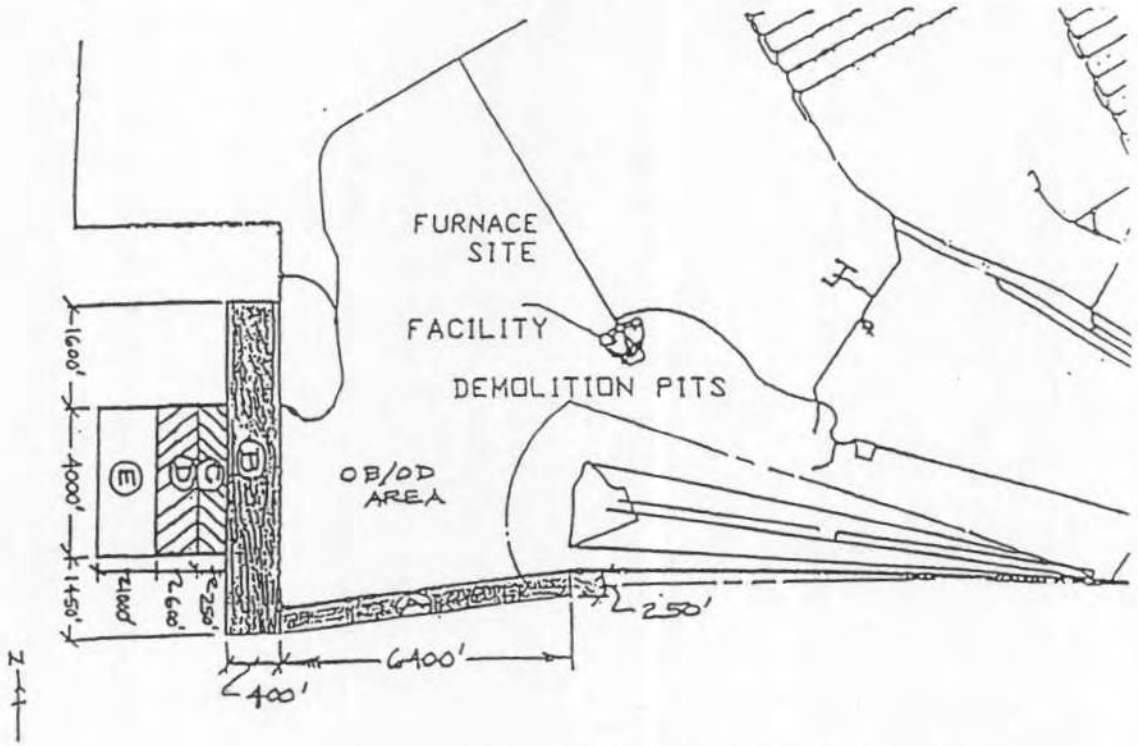
2.2 Tooele Army Depot - South Post

2.2.1 TEAD-S is located in Northwest Utah, approximately 65 miles southwest of Salt Lake City, Utah. TEAD-S was established in 1942 and has been a major chemical ammunition storage center for the U.S. Army. The current mission of TEAD-S is to receive, store, and dispose of chemical munitions.

2.2.2 The original TEAD-S site is composed of three areas adjacent to the southern boundary of the post (see Figure 1-2). Area A is 200 feet wide and extends westward for 20,600 feet from sampling well #S-16-88 to well #S-19-88. Area B is 400 feet wide and 4,800 feet long adjacent to the southern edge of Area A at its extreme western end. Area C is 400 feet wide and runs westerly from the extreme eastern end of Area A for 6,600 feet. The only work conducted during the first phase was establishing the site boundaries and some initial gridding [see Volume II, Daily Journals]. Access to this site was difficult under dry weather conditions and nearly impossible when wet or muddy; deferring this site to the following spring was a wise and prudent decision.

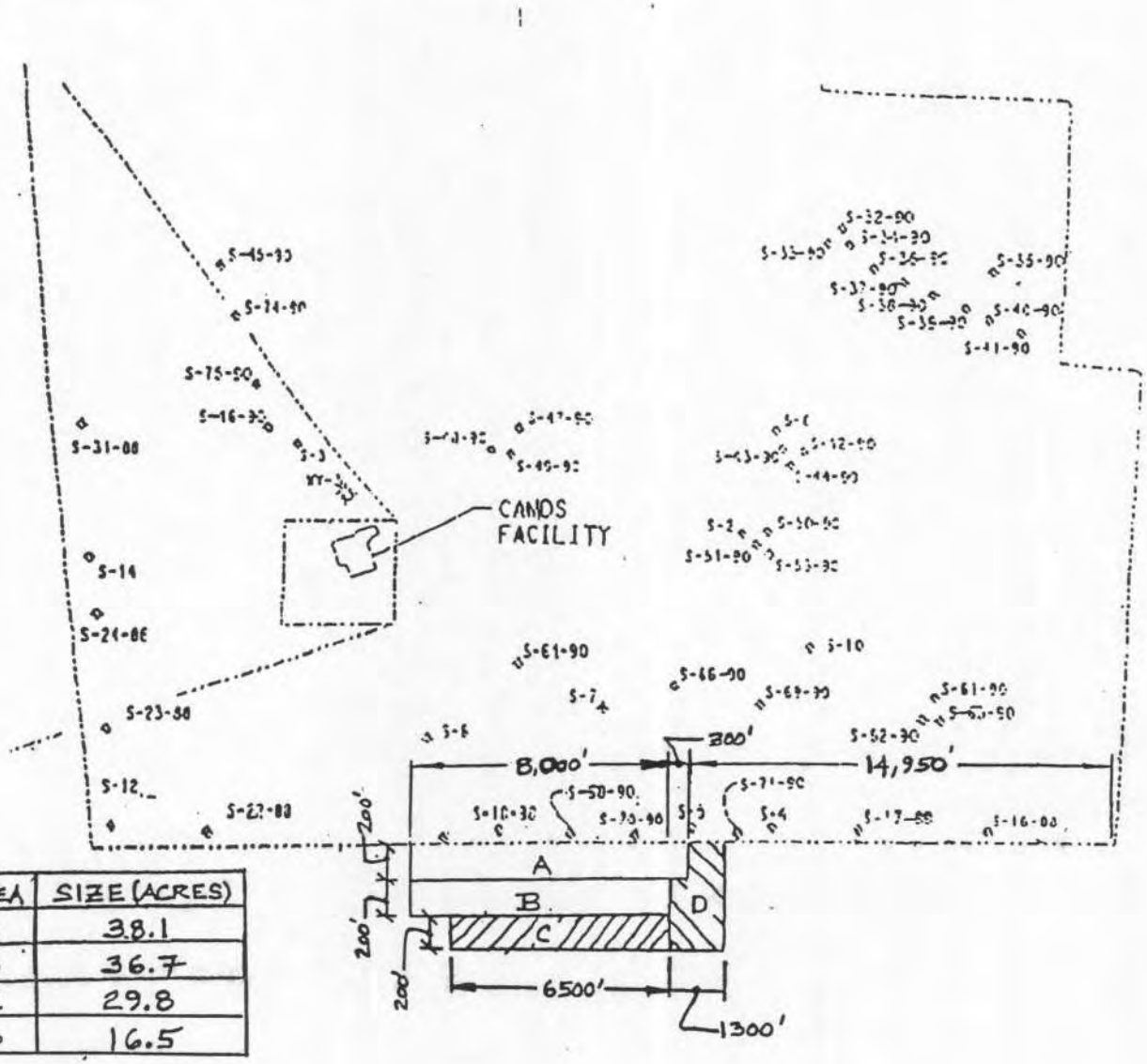
2.2.3 Subsequent modifications to the TEAD-S Delivery Order altered the configuration and requirements for the site. The final modification, Modification 7, delineated four areas to be surface cleared only (see Figure 1-5).

FIGURE 1-4



TOOELE ARMY DEPOT - NORTH
SW CORNER
HTS

FIGURE 1-5



AREA	SIZE (ACRES)
A	38.1
B	36.7
C	29.8
D	16.5

TOOELE A.D. - S. POST

DACA87-92-D-0133
Delivery Order 010 Mod 07

Fig. 1
Revised 20 June 94

Operations at TEAD-S will be discussed in Chapter Two.

2.3 Mobilization and Support

2.3.1 As part of mobilization, HFA purchased and shipped to the site the equipment and materials listed in Paragraph 8 of the Work Plan. Government Furnished Equipment (GFE) was shipped to the site from CEHND [see Volume II, Government Tracking Log]. TEAD provided office and storage space on the post. Telephone services were arranged through the Golden West Telephone Co. and two commercial lines were installed. TEAD also provided fire fighting support and assisted HFA personnel in burning brush on the site. DRMO provided containers to deposit the scrap collected on site and provided transportation for them.

2.3.2 The post clinic provided first response and routine emergency medical support; extensive or traumatic injuries would be transported to the Tooele Valley Medical Center. The decision to transport for further treatment rested with the post medical personnel.

2.3.3 The HFA Project Manager (PM), SUXOS, a UXO Supervisor (UXOS), and one UXO Specialist traveled to the site on September 20, 1993. This team completed preliminary site work, such as establishing the site boundaries, beginning with the layout of 244 grids, and installing two access gates in the perimeter south and west fences. The gates were necessary to transfer UXO to TEAD demolition range personnel for disposal. The remainder of the crew members arrived on site September 27, 1993 and, after in processing and site specific training, began site work on September 28.

3 OEW SEARCH AND REMOVAL OPERATIONS

3.1 OEW search and removal of the TEAD-N site was a straight forward OEW search and removal operation. The terrain of Area A was flat with no significant features. A dirt road ran the entire distance along the north side of the area. Area B is generally flat with the northern end rising sharply to a flat bluff. A dry wash filled with tumbleweeds runs roughly southeast through Area B at approximately 2,000 feet from the northern boundary. The site was generally accessible to the public, although remote, and there was traffic to and from, most of which was associated with the gravel mine south of the site. On one occasion someone was target practicing in the flat area on the high bluff at the north end of Area B. All such incidents were reported to the TEAD authorities.

3.2 The project was executed as detailed in the approved Work and Accident Prevention Plans. OEW removal began in Areas A and B on September 28, 1993. Two UXO teams were assigned to each area. Each team consisted of a UXOS, two UXO Specialists, and two Magnetometer Operators. In order to maintain a safe separation distance, the teams' working areas were staggered. In Area A, one team started at the extreme eastern end of the area and the other started at the 3,200 foot line; both teams worked in a westerly direction always maintaining a safe separation. Teams surveying Area B employed the same techniques to maintain separation only proceeding northward.

3.3 Area A consisted of sixty-six 100 foot x 250 foot grids. The area was significant in that the dirt road contained an extremely large quantity of non-OEW scrap and consumed many man hours investigating each contact. Because the area was easily reached by road, there was also large quantities of discarded automobile parts and other trash. The location of each of these finds is depicted by an X in the planimetric map [see Appendix C] and the individual grids sheets [see Volume II]. A 105mm High Explosive Anti Tank (HEAT) Projectile was the only UXO item detonated in place in Area A. All UXO items located and excavated were turned over to the TEAD demolition range personnel for disposal. Area A was completed on November 4, 1993 and personnel shifted to Area B.

3.4 Area B consisted of one hundred and forty 100 foot x 200 foot grids, with two 50 foot x 100 foot grids at the northern end to complete the 7,050 foot length of the area. The grids were numbered consecutively 1 through 70 and further designated "A" or "B" with the lane of grids closest to the fence being the "A" lane. The area rises sharply creating a flat bluff at the north end of the site. This area has apparently been used for a long period of time as a "camping/party" area and was littered with all types metallic trash. This litter, coupled with the terrain, hampered and slowed searches in that area. The remainder of the area was relatively flat and had been recently plowed making sweeping and digging easier. There were some delays in obtaining a permit to burn the dry wash because of air quality, but this did not affect the completion of work in that area. Area B was completed on November 17.

3.4.1 The heaviest contamination in Area B begins approximately 2,500 feet north of the southwest corner of TEAD-N and continues for another 3,500 feet north. These portions of Area B are in a direct line with the OB/OD grounds and this would seem to account for the large quantities of OEW items and related materials found in the site. HFA UXO teams detonated in place 21 UXO items that were determined to be unsafe to move. [see Volume II].

3.4.2 During the sweeping of grids in Area B, HFA personnel visually observed and reported UXO lying on the surface beyond their work boundaries. The area west of Area B was briefly surveyed by the CEHND Safety Specialist and HFA's SUXOS and seven UXO items were found.

3.5 Modification 3 to the Scope of Work dated November 10, 1993, added Area C to the project. Area C is 250 feet wide and 4,000 feet long and begins approximately 1,200 feet to the north of the southwest corner of the TEAD-N fence. The site boundaries were established and staked and crews laid out 40, 100 foot x 250 foot grids. Work proceeded in Area C as planned. All UXO items located were turned over to the TEAD range personnel. Area C was completed on November 17, 1993. OEW items were again observed and reported beyond the cleared boundaries of Area C.

3.6 The extent of contamination found in Area C parallels that found in Area B, with the heaviest concentrations located in an area beginning at roughly 2,500 feet from the southwest corner of the post and extending northward 3,500 feet.

3.7 The TEAD- N project site was completed November 17, 1993. A total of 3,793 UXOs and 18,038 pounds of scrap were located and removed from the project site. Table 1-1 list the quantities and types of UXO items recovered; 21 of these items were detonated in place. Table 1-2 lists these items and the grid location where they were detonated. With the completion of all areas at TEAD-N, the HFA crew shifted operations to TEAD-S and began setting up to conduct OEW removal under DO #10 in the areas bordering the southern boundary fence of the post.

3.8 On Monday, November 22, 1993, CEHND directed HFA to demobilize all personnel. Monday and Tuesday were dedicated to inventorying and preparing equipment for transport. Demobilization was completed on November 25, 1993.

4 QUALITY CONTROL AND SAFETY

4.1 During the OEW removal operations conducted under this Delivery Order, the HFA QC/Safety Officer conducted sweeps of 10% of the project grids [see Volume II]. He also observed UXO personnel to determine that their techniques were proper and that they were following the prescribed safety procedures.

TABLE 1-1

UXO ITEMS LOCATED AND RECOVERED (DO #7)

20 SEP 1993 - 17 NOV 1993

PROJECTILES	
20MM	125
30MM	19
37MM	178
40MM	44
57MM	34
75MM	18
90MM	46
90MM APHE	1
105MM	32
105MM ILUM	1
FUZES:	
M31 SERIES	1
M38 SERIES	1
M48 SERIES NOSE FUZE	564
M50 SERIES	1
M52 SERIES NOSE FUZE	169
M54 SERIES FUZE	5
M57 SERIES	1
MK 66 BASE FUZE	1503
M83 FUZE	1
M84 FUZE	1
M103 FUZE BOMB, NOSE	170
M114 SERIES FUZE	3
PROXIMITY FUZE (VT)	53
POWDER TRAIN TIME FUZE (PTTF)	1
MECHANICAL TIME FUZE	51
FUZE BASE	3
BASE DETONATING FUZE	53
POINT DETONATING FUZE	212
NOSE FUZE, PROJO	7
FUZE, 3.5" ROCKET	4
FUZE, MORTAR	52
MK344 FUZE	1
FUZE, 20MM PROJO	1
FUZE, UNKNOWN	1
MORTARS:	
81MM	8
82MM	1
BOMBS:	
20LB FRAG	13
25LB FRAG	3
60LB FRAG	1
90LB FRAG	9
120LB FRAG	1
220LB FRAG	1
250 GP BOMB	2
4LB M83 BUTTERFLY	1
PRACTICE BOMB	1

FRAG	1
MISCELLANEOUS:	
MK 42 SUBMUNITION	1
2.36" ROCKET	2
3.5 IN. ROCKET	1
3.5" ROCKET MOTOR	1
5" ROCKET	1
.30 CAL	2
12 GA. SHOT SHELLS	9
TRACER ELEMENTS	127
BOOSTERS	164
ADAPTER BOOSTER	1
DET LEAD	2
22 CAL LR	54
7.62MM	1
FLASH TUBE	1
BASE PLATE	6
TOTAL	**3,772**

SOME FUZES WERE SO BADLY DAMAGED OR DETERIORATED THEY COULD ONLY BE IDENTIFIED AS TYPE BY FUNCTION.

TABLE 1-2

UXO ITEMS DETONATED IN PLACE (DO #7)

20 SEPT - 17 NOV 1993

GRID LOCATION	TYPE	QUANTITY	DATE
A 34	105MM HEAT PROJECTILE	1	10/12/93
B45a	37MM PROJECTILE	1	11/01/93
B46a	37MM PROJECTILE	1	11/01/93
B62b	37MM PROJECTILE	1	11/01/93
B46b	57MM PROJECTILE	1	11/03/93
B59b	90MM HEAT PROJECTILE	1	11/03/93
B47b	37MM PROJECTILE	1	11/03/93
B60b	37MM PROJECTILE	1	11/03/93
B56b	37MM PROJECTILE	3	11/04/93
B38a	37MM PROJECTILE	1	11/09/93
B39a	37MM PROJECTILE	1	11/09/93
B44b	37MM PROJECTILE	1	11/09/93
B55a	37MM PROJECTILE	1	11/09/93
B63a	37MM PROJECTILE	1	11/09/93
B63a	40MM PROJECTILE	1	11/09/93
B55a	90MM HEAT PROJECTILE	1	11/09/93
B40a	37MM PROJECTILE	1	11/15/93
B41a	37MM PROJECTILE	1	11/15/93
B41a	37MM PROJECTILE	1	11/16/93
TOTAL		**21**	

4.2 Each magnetometer was tested each morning and again after lunch to determine that it was operating correctly. A piece of steel pipe 18 inches x 3.5 inches in diameter was buried at three feet and used as a standard for determining correct operation of each magnetometer.

4.3 Safety briefings were conducted each morning prior to the start of work [see Volume II]. General topics were presented as well as site specific topics whenever required. Team leaders were encouraged to reinforce safety at every opportunity and brief their teams whenever the situation changed or requirements changed.

4.4 All scrap was given a 100% inspection by the QC/Safety Officer to ensure that all material turned over as scrap was "free of explosives or explosive residue" [see Volume II].

4.5 The project was completed without a QC discrepancy or accidents of any nature.

5 SUMMARY

5.1 The tasks and requirements under Deliver Order #07 were accomplished during the following dates:

Mobilization (Initial Crew)	Sept. 20, 1993
Site Preparation	Sept. 21-25,1993
OEW Removal TEAD-N	Sept. 27 - Nov. 17, 1993
Demobilization	Nov. 24, 1993

5.2 A total of 3,793 UXO items were recovered and destroyed and 6,440 manhours were used during this phase of Delivery Order #07. Neither HFA nor the government were charged for vehicle mileage, but these vehicles were used for 1,440 vehicle hours supporting this project. Three hundred seventy-six (376) hours were expended mobilizing to and demobilizing from the site. Table 1-3 shows a summary of manhours expended by task/labor category.

5.3 All objectives of the Scope of Work for this delivery order were met within schedule and budget. The objectives of the Scope of Work for TEAD-S were deferred until spring.

TABLE 1-3

Summary of Manhours Expended

Labor Category	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
Certified Ind Hyg							
Contract Admin	2			31.6			
Draftsman/CADD							
Magnetometer Operator				2250			
Program Manager	4			24			3.2
Project Manager	80			20			48.2
Quality Control Specialist					40		
Secretary	40			40			49
Senior UXO Supervisor	40			336.4			40
Site Safety Officer				275.6	40		
Typist							20
UXO Specialist				2417	100		
UXO Supervisor				998	40		
TOTALS	166			6393	220		160.4

Summary of Manhours Expended for DO 007
9 Sept 1993 - 24 November 1993

TOOELE ARMY DEPOT
FINAL REPORT

CHAPTER TWO
11 May - 14 July 1994

1 INTRODUCTION

1.1 HFA, Inc. returned to TEAD to complete OEW clearance of selected areas outside the perimeter fence at South Post (Delivery Order #10). During the winter this scope was changed. The original three areas at TEAD-S were consolidated into two contiguous areas (Areas A and B), each approximately 8,000 foot x 200 foot each (see Figure 2-1). In addition, DO #07 was modified directing HFA to conduct further clearances of areas identified during the previous clearance (see Figure 2-2). The clearance of TEAD-N was planned to follow the completion of the Areas A and B at TEAD-S.

2 DISCUSSION

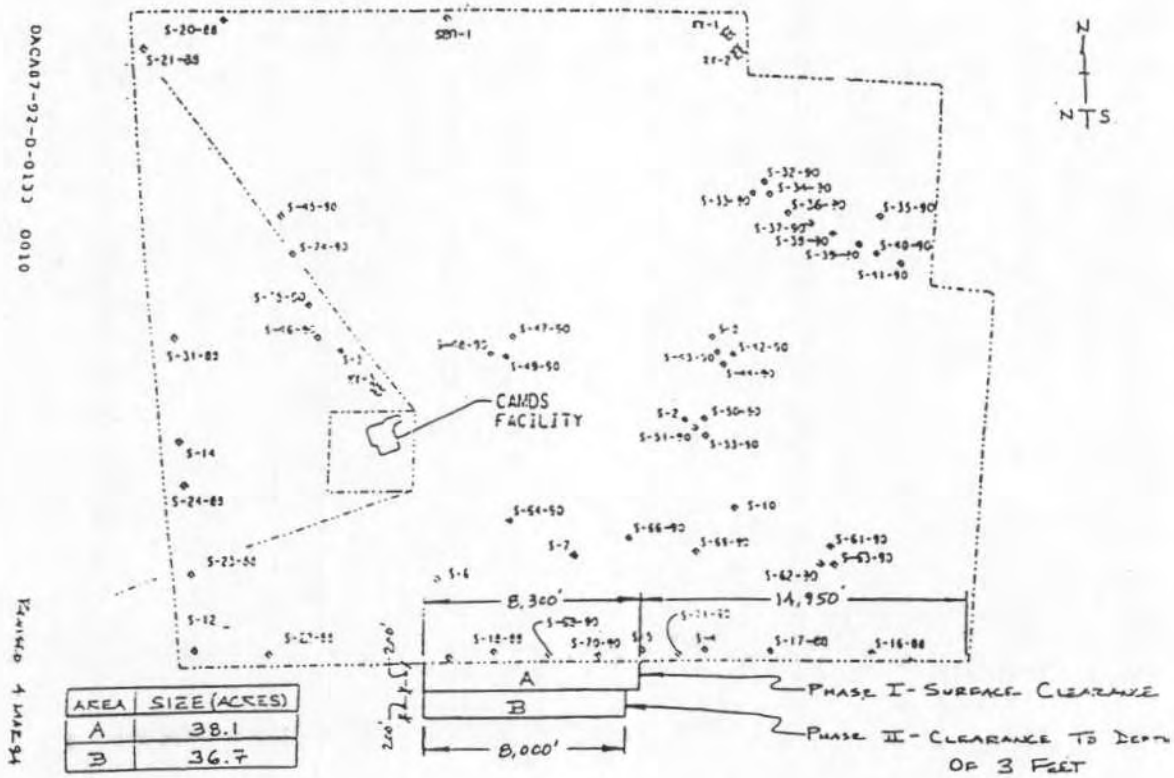
2.1 Mobilization and Support

2.1.1 Prior to mobilization, HFA shipped equipment to the TEAD. TEAD provided office space and storage areas for equipment. TEAD also provided all Demolition supplies for the project. The SUXOS and the QC/Site Safety Officer traveled to the site on May 11, 1994. Initial liaison with TEAD representatives and equipment rental/procurement was conducted on May 12 and 13. Ten crew members arrived on 16 May for work on Delivery Order #10. The remaining two UXO Specialists arrived on May 18.

3 SURFACE OEW SWEEP, TEAD-S

3.1 Work commenced on May 17, with the layout of eighty-three 100 foot x 100 foot grids in area A. Area B contained 80 grids of the same dimensions. The surface sweep of Area A began on May 18. Grids were swept working north to south beginning with Grid 1 and continuing to the West. On May 20, the grid lay out team found three M70, 115 pound bombs and one Mk 42, 100 pound bomb outside our designated sweep area. All of the bombs were inspected by the CEHND Safety Representative and the SUXOS. The bombs were found to be unfuzed and empty. The bombs were turned over to TEAD as scrap.

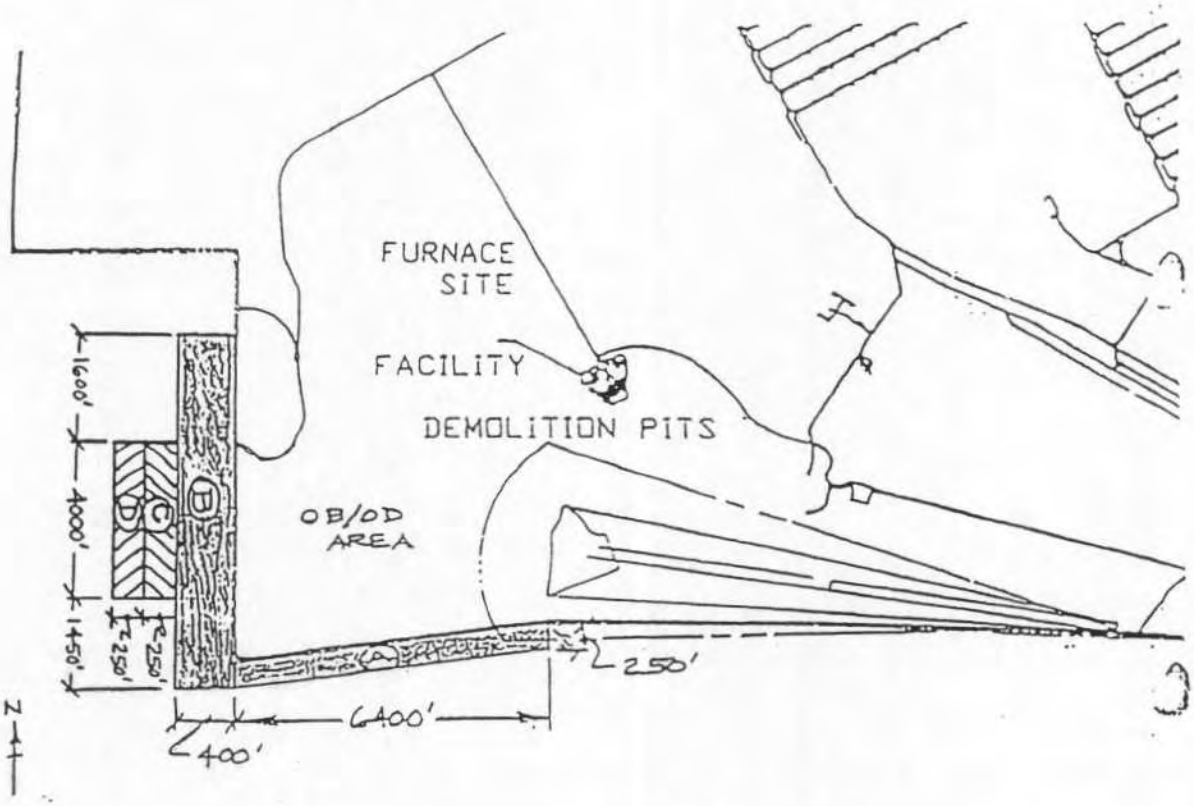
FIGURE 2-1



AREA	SIZE (ACRES)
A	38.1
B	36.7

TOOELE A.D. - S. POST

FIGURE 2-2



TOOELE ARMY DEPOT - NORTH
SW CORNER
NTS

This discovery led to expanding the clearance area and the addition of Areas C and D. These bombs were located in Grids 3C, 16C, 17C, and 21C.

3.2 Areas C and D were added by Modification 5 to DO #10 on May 26, 1994 (see Figure 2-3). Area C added 63 grids to the south of Area B. Area D was east of A, B, and C and contained 36 grids. These grids were swept in the same manner as before. These areas were completed on the morning of June 6, 1994.

3.3 Sixteen UXO items were located and turned over to TEAD for disposal. A listing of all UXO items found during the clearance is at Table 2-1.

4 SUBSURFACE OEW SWEEP TOOELE-N

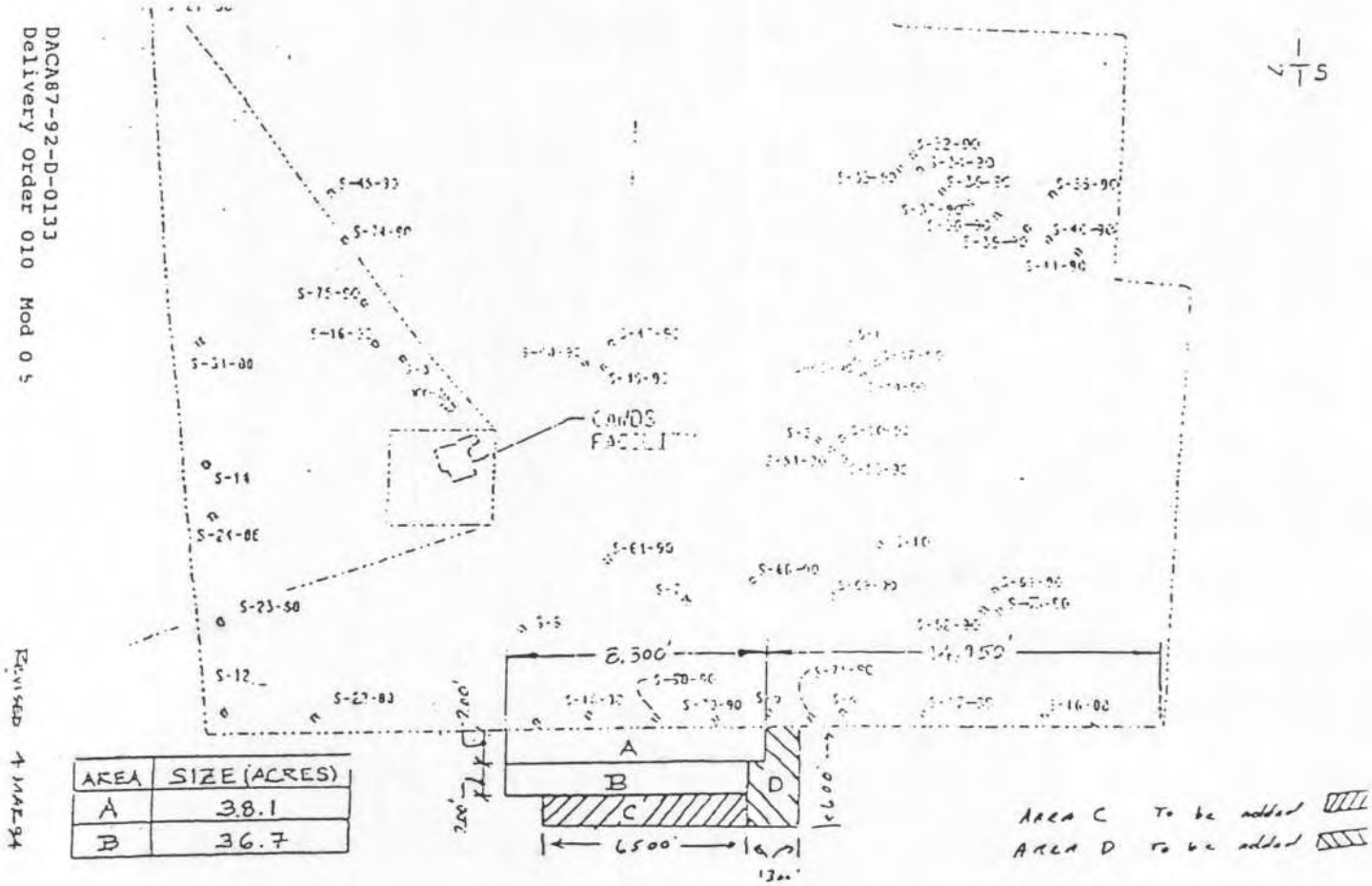
4.1 Work commenced on Delivery Order #07 on June 6, 1994. Area D (see Figure 2-4), which encompassed 4,000 foot x 250 foot, was gridded and swept with magnetometers.

4.2 On June 14, 1994, a burn was conducted in a ditch which runs through a portion of the north end of Area D. The ditch contained large amounts of tumbleweed which had to be removed prior to search operations. The TEAD Fire Department stood by during the burn and assisted in putting the fire out at the end of the operation. The operation was conducted without incident.

4.3 Area D was expanded by 150 feet on June 14, 1994, because OEW items were observed outside the original area. The total area was then 400 foot x 4000 foot. At that time, the plan was to continuing working at TEAD-N until close of business June 30, 1994 and then return to TEAD-S. Due to the large amounts of OEW and related material observed beyond the work area, the Delivery Order was modified on June 28, and Area D was expanded another 200 feet. The following day, June 29, Modification 9 to DO #07 was received which added Area E and transferred all remaining money from TEAD-S to TEAD-N. This funded an additional two weeks of clearance effort at TEAD-N. Area E was 1000 foot x 4000 foot.

4.4 During the removal action of TEAD-N, HFA crews located a total of 1,435 UXOs. Table 2-2 lists the 18 UXO items that were considered unsafe to move and were detonated in place by HFA UXO personnel. Table 2-3 lists the 1,417 UXO items turned over to TEAD for disposal at the TEAD-N OB/OD grounds.

FIGURE 2-3



AREA	SIZE (ACRES)
A	3.8.1
B	36.7

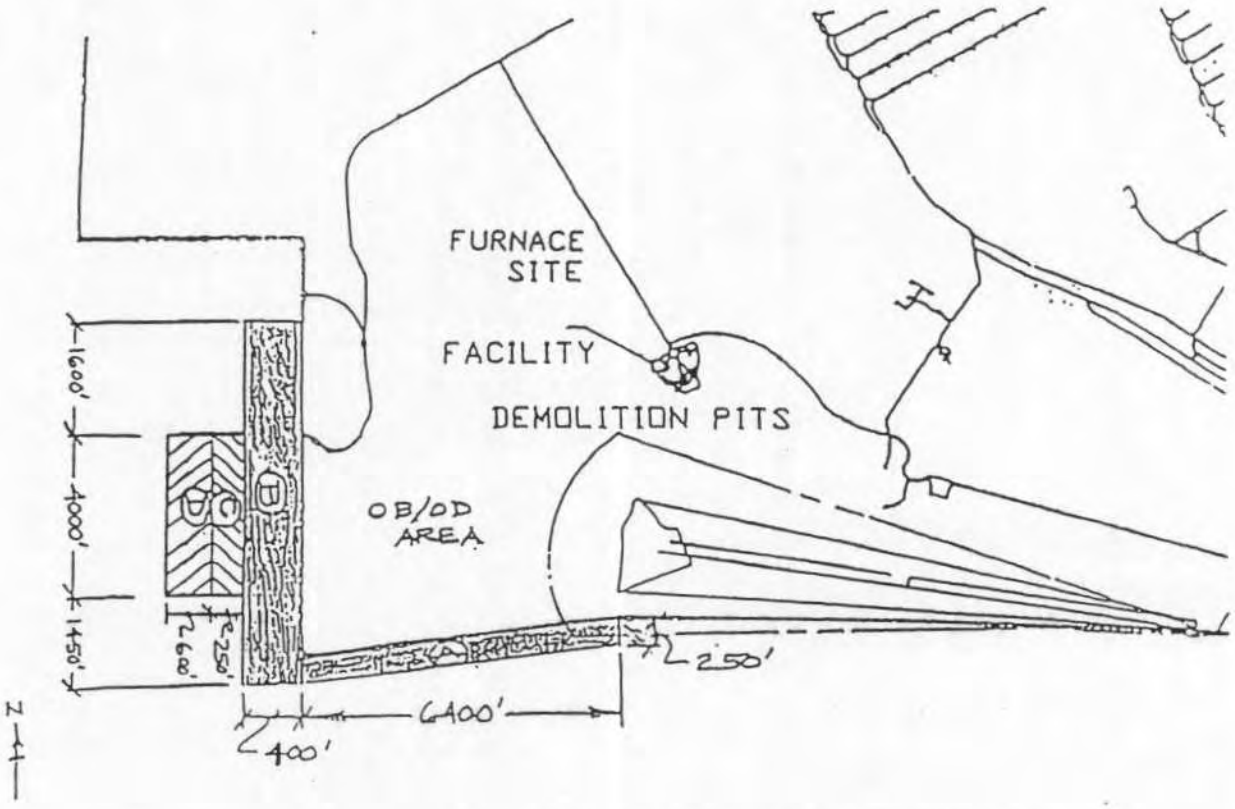
TABLE 2-1

UXO ITEMS LOCATED AND RECOVERED (DO #10)

17 May - 6 June 1994

FUZE, NOSE	1
BOOSTER ADAPTER	7
BOMBLET, MAGNESIUM	3
COMPONENT, MAGNESIUM	2
CARTRIDGE, 90MM	1
PROJECTILE 90MM	1
TUBE, BURSTER	1
TOTAL	**16**

FIGURE 2-4



TOOBLE ARMY DEPOT - NORTH
SW CORNER
NTS

DACA87-92-D-0133
Delivery Order 0007 Mod 08

REVISED 17 JUNE 94

4.5 On the afternoon of July 12, 1994, HFA personnel were asked to conduct sample sweeps outside the designated areas. The purpose of the sweeps was to determine the extent of ordnance contamination in anticipation of a follow on operation at TEAD-N. Nine UXO items were located to the north and west of Area E. The locations of these items were recorded by the CEHND Safety Representative.

5 QUALITY CONTROL

5.1 During surface sweep operations, the QC/Site Safety Officer conducted 10% sweeps of each grid. This was accomplished by following the sweep line and conducting visual sweeps.

5.2 During subsurface operations, magnetometers were tested at least twice daily against an 18" pipe buried at a depth of three feet. Also, several inert fuzes and ordnance items were buried at various depths to ensure magnetometers were operating properly. Tests were conducted at the beginning of the day and after lunch.

5.3 Quality control inspections were performed by conducting independent magnetometer sweeps in an X pattern in each and every grid. When the QC/Site Safety Officer located any ordnance item in a grid, the grid was re-swept 100%.

6 DEMOBILIZATION

6.1 July 13, 1994 was spent inventorying, packing, shipping, and turning in of equipment. All equipment on site was shipped to the CEHND Safety Representative at Ft. Ord, California, with the exception of one computer, one printer, six CB radios, and three Motorola radios. These items were shipped to CEHND. All HFA personnel demobilized on July 14, 1994.

TABLE 2-2

UXO ITEMS DETONATED IN PLACE (DO # 07)

6 June - 14 July 1994

37MM PROJO	15
57MM PROJO	3
TOTAL	**18**

TABLE 2-3

UXO ITEMS LOCATED AND RECOVERED (DO #07)

6 June - 14 July 1994

FUZE, NOSE	408
FUZE, BASE	871
FUZE, TAIL	16
TDD	15
57MM PROJO	14
90MM PROJO	18
37MM PROJO	26
ADAPTER BOOSTER	13
25 LB. FRAG BOMB	4
75MM PROJO	4
BASE ELEMENT	8
FMU	2
105MM PROJO	4
20MM PROJO	1
FUZE, UNKNOWN	2
FUZE VT	2
BURSTER TUBE	1
FRAG, CONTAMINATED WITH HE	7
100LB FRAG BOMB	1
TOTAL	**1,417**

7 SUMMARY

7.1 The tasks required under Delivery Orders #07 and #10 were accomplished during the following dates:

Mobilization (Crew)	May 16, 1994
Grid Establishment	May 17, 1994
Surface Sweep TEAD-S	May 18 - June 6, 1994
Subsurface Sweep TEAD-N	June 6 - July 12, 1994
Survey and Mapping	June 27-28, 1994
Characterization Sweeps	July 12, 1994
Demobilization	July 14, 1994

7.2 A total of 3,176 manhours were used in support of the Second Phase of DO #7, and a total of 2,524.5 manhours were used supporting DO #10. A total of 20,631 vehicle miles were driven. Two hundred, eighty (280) hours were expended mobilizing to and demobilizing from the site. Tables 2-4 and 2-5 show summaries of manhours expended by task/labor category.

7.3 During this Delivery Order, all objectives of the Scope of Work were accomplished within schedule and budget.

8 RECOMMENDATIONS

8.1 General observation, the density of ordnance in outer grids and samples, and sweeps conducted by HFA during both phases of this project, all indicate that OEW contamination is located well outside the areas cleared during this operation.

8.2 HFA recommends a follow on operation be conducted in TEAD-N. Although no OEW items were reported beyond the boundaries of area A during the first phase, HFA CEHND Safety personnel did investigate the area in June 1994 and located some UXO items. The area to be investigated lay to the south of Area A.

8.3 The land west of Areas B and E have the greatest potential for OEW contamination. It is difficult to recommend distances to be investigated, but HFA recommends a formal sampling of the area to the west of Areas B and E. This sampling should extend to the county road that generally borders the site to the west. The results of sampling this area would be used to determine the extent of the area for future OEW removal requirements.

TABLE 2-4

Labor Category	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
Certified Ind Hyg							
Contract Admin				22.5			
Draftsman/CADD							
Program Manager	2			16			2.8
Project Manager	20	20		40			38.8
Quality Control Specialist							
Secretary	20			20			46
Senior UXO Supervisor	40			197.6			40
Site Safety Officer				191	20		
Typist							20
UXO Specialist				1648	30		
UXO Supervisor				703	30		
TOTALS	82	20		2838	80		147.6

Summary of Manhours Expended for DO 007
6 June 1994 - 12 July 1994

TABLE 2-5

Labor Category	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
Certified Ind Hyg							
Contract Admin	7			14			
Draftsman/CADD							
Program Manager	4			30			2
Project Manager	4			60			16
Quality Control Specialist							
Secretary							42.5
Senior UXO Supervisor	40			91			24
Site Safety Officer				100	20	43	
UXO Specialist				1216	30		
UXO Supervisor				477	30		
TOTALS	55			1988	80	43	84.5

Summary of Manhours Expended for DO 10
18 May 1994 - 6 June 1994

9 DOCUMENTATION

9.1 Documentation for this chapter of the report consisted of:

Work Plan and Accident Prevention Plan
Color Photographs of Site Operations
Site Survey and Planimetric Maps
Property Tracking Log
Ordnance turn-in Sheets
Daily Journals
QC/Safety Records
Scope of Work
Video Tape of Operations

APPENDIX A

SCOPE OF WORK
DELIVERY ORDER #07

ORDER FOR SUPPLIES OR SERVICES

(Contractor must submit four copies of Invoice)

Form Approved
OMB No. 0704-0187
Expires Aug 31, 1992

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for re viewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing th collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwor Reduction Project(0704-0187), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your comple form to the procurement official identified in item 6.

1. CONTRACT/PURCH ORDER NO.	2. DELIVERY ORDER NO.	3. DATE OF ORDER.	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
DACA87-92-D-0133	0007	07/07/93	PM0042-1793-0240	

6. ISSUED BY — CODE 8013
U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)-955-5633

7. ADMINISTERED BY — CODE EMPTY

8. DELIVERY FOB
[ ] DEST
[X] OTHER
(See Schedule)

9. CONTRACTOR Vendor Id: 00011023 CODE 7W639 FACILITY CODE

NAME AND ADDRESS
HUMAN FACTORS APPLICATIONS,INC
1966 BROOKE DRIVE
NEW HOPE, PA 18938-

10. DELIVER TO FOB POINT BY

11. MARK IF BUS.
[X] SMALL
[ ] SMALL DIS ADVANTAGE
[ ] WOMEN-OWN

12. DISCOUNT TERMS
0 % 0 Net 0

13. MAIL INVOICES TO
See Block 15

14. SHIP TO — CODE EMPTY
DACA8792D0133/0007

15. PAYMENT WILL BE MADE BY — CODE 4003
US ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-RM-F (EXAM)
PO Box 1600
Huntsville, AL 35807-4301

MARK ALL PACKAG AND PAPERS WITI CONTRACT OR ORDER NUMBER

16. DELIVERY [X] This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.

PURCHASE [ ] Reference your furnish the following on terms specified herei

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICE	20. QUANTITY ORDERED/ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	Refer to D.O. 0007 and Statement of Work entitled "Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot North Area (TEAD-N), UT" dtd 25 Jun 93 (10 pg w/Figure 1) under DACA87-92-D-0133 in all correspondence. Questions relating to contract should be referred to Mary				

*If quantity accepted by the Government is same as quantity ordered, indicate by x. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
BY: Danny Biggs m09
CONTRACTING/ORDERING OFFICER

25. TOTAL 327205.6

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[ ]INSPECTED [ ]RECEIVED [ ]ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE | SIGNATURE OF AUTHORIZED GOVERNMENT REP.

27. SHIP. NO.
[ ] PARTIAL
[ ] FINAL

28. D.O. VOUCHER NO.

30. INITIALS

31. PAYMENT
[ ] COMPLETE
[ ] PARTIAL
[ ] FINAL

32. PAID BY

33. AMT VERIFIED CORRECT

34. CHECK NUMBER

36. I certify this account is correct and proper for payment

DATE | SIGNATURE AND TITLE OF CERTIFYING OFFICER

35. BILL OF LADING NO.

37. REC'D AT	38. RECEIVED BY	39. DATE REC'D	40. TOTAL CONT.	41. S/R ACCOUNT NUMBER	42. S/R VOUCHER NO.

SCOPE OF WORK
UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION
TOOELE ARMY DEPOT NORTH AREA (TEAD-N), UTAH

25 JUNE 1993

1.0 **BACKGROUND AND GENERAL STATEMENT OF WORK.** The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration (IR). Ordnance and Explosive Waste (OEW) contamination exists on private property as a result of Department of Defense activities.

1.1 OEW is a safety hazard and constitutes an imminent and substantial endangerment to the local populace and site personnel. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 104 and the National Contingency Plan, Sections 300.120(c) and 300.400(e). In accordance with the above, no Federal, State, or Local permits are required nor will be obtained for on-site disposal of OEW.

1.1.1 OEW is not classified as hazardous waste, thus, this action does not fall under the provisions of 29 CFR 1910.120.

1.1.2 This project does not require an on-site full time contractor project manager as identified in Section C, subsection 3.1.1 of the basic contract.

1.1.3 Due to anticipated winter weather problems, this project shall be completed 4 weeks from the start date.

1.2 Due to the inherent risk in this type of operation, the contractor shall be limited to a 40 hour work week: either 5 - 8 hour days or 4 - 10 hour days. UXO personnel shall not perform UXO related tasks more than 10 hours a day.

1.3 <u>GENERAL DESCRIPTION.</u>

1.3.1 Tooele Army Depot is located in northwest Utah approximately 35 miles west southwest of Salt Lake City, UT. The installation contains approximately 24,732 acres. TEAD was established in 1942 and has been one of the major ammunition storage and equipment maintenance centers for the US Army of the ensuing years. The current mission of TEAD is to receive, store, issue, maintain, and dispose of munitions.

1.3.2 This SOW pertains to the following areas to be cleared of OEW and scrap located outside the southern and western installation boundaries adjacent to the southwest corner of TEAD-N (see Figure 1).

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6400 feet to the east of the southwest corner of the installation.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the north and 250 feet to the south of the southwest corner of the installation.

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared.

1.3.4 The area within the southwest boundary fence consists of an Open Burn/Open Detonation (OB/OD) area and a former firing range. The OB/OD area has been used since the 1940's for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey WAS CONDUCTED by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non-OEW related scrap. The following items were found during the site visit: a large portion of what appears to be a 250 lb bomb, a 90mm HE projectile, and a 155mm base ejection projectile.

1.3.6 In January 1992, a single 155mm projectile was found off depot and moved to the OB/OD area. The item was destroyed by detonation. It is unknown at this time if the projectile was a result of over firings from the firing range or if it was a kick-out from a detonation at the OB/OD area.

1.4 DEFINITIONS See Section C, subsection 2.3 of the basic contract.

2.0 **OBJECTIVE.** The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 **DESCRIPTION OF SERVICES.**

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1, BASIC CONTRACT.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor, and shall not extend longer than 5 working days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, DRMO, Directorate of Industrial Risk Management (DIRM), Directorate of Chemical

Munitions and Ammunition Operations, and Medical Facility. Coordination shall also be made with the Federal Aviation Administration (FAA) to ensure local air clearance. No UXO related activities will be performed during the site visit. The contractor shall coordinate with the TEAD-N Security Office (801-833-2713) prior to the site visit. The schedule for the site visit shall be coordinated with the USAEDH Project Manager (Mr. Ray Leone, (205-955-1243) at least 10 days in advance.

3.1.2 Disposal Alternatives. Based on the site visit, the contractor shall describe feasible alternatives for disposal and recommend the safest and most cost effective method of treatment and disposal of the explosive ordnance, inert ordnance, explosive, and debris. This letter proposal shall be forwarded to the contracting officer (CO). The method of treatment will be selected and approved by the CO after which the contractor will then proceed with preparation of the WP.

3.1.3 Work Plan (WP). The contractor shall prepare and submit a site specific work plan to the Government for approval prior to beginning any UXO related activities on the site. The WP shall outline the contractor's proposed methodology for accomplishing the objective and following tasks. This shall include site-specific training, UXO related procedures and practices, equipment, administrative area and equipment, demolition materials and their security and accountability system, personal protective equipment, internal and external communications systems, responsibilities of project personnel, resumes of all UXO personnel and key non-UXO personnel, on-site and off-site medical facilities and emergency response actions, daily work schedule, project time line, UXO safety and site general safety. All UXO related procedures shall comply with *CEHND Safety Concepts and Basic Considerations for UXO*. The WP shall include, as a minimum, the following sub-plans. See Section C, subsection 3.2.1 of the basic contract for detailed requirements.

3.1.3.1 UXO Operational Plan.

3.1.3.2 Accident Prevention Plan (See Section J, Attachment 4 of basic contract.)

3.1.3.3 Equipment Plan.

3.1.3.4 Surveying and Mapping Plan.

3.1.3.5 Environmental Protection Plan (See Section C, subsection 5.0 of the basic contract.)

3.1.3.6 Quality Control Plan.

3.1.3.7 Work, Data, and Cost Management Plan.

3.1.3.8 Other subplans identified in Section C, subsection 3.2.1 of the basic contract are not required for this delivery order.

3.2 TASK 2: PERFORM COMMUNITY RELATIONS. This task shall be accomplished in accordance Section C, subsection 3.2.3, of the basic contract.

3.2.1 The contractor shall assist, if requested, in arranging a local public meeting to inform the public of the purpose of this clearance, the procedures to be followed, and the cooperation requested.

3.2.2 All press releases and media appearances shall be coordinated with and approved by the Public Affairs Officer (PAO), TEAD-N.

3.2.3 A written record of the public meeting attendees, questions, and answers shall be provided as part of the final report.

3.2.4 Public Affairs The contractor shall not make available or publicly disclose any data generated or reviewed under this contract or any subcontract unless specifically authorized by the CO and the TEAD-N PAO. When approached by any person or entity requesting information about the subject of this contract, the contractor shall defer to PAO for response. Reports and data generated under this contract shall become the property of the Government and distribution to any other source by the contractor is prohibited unless authorized by the CO.

3.3 TASK 3: PERFORM LOCATION SURVEYS AND MAPPING

3.3.1 All surveying or mapping crews shall be escorted by an UXO Supervisor. A magnetometer shall be used to survey the location for the establishment of any monuments or markers.

3.3.2 As needed, the contractor shall survey and establish the boundaries of areas stated under subsection 1.3 of this SOW. The contractor shall mark the corners and outer edges of the designated areas with stakes or other visible temporary markers.

3.3.3 Items and data to be submitted to CEHND as part of this task are as follows:

3.3.3.1 A tabulated list of all control points showing the adjusted coordinates established and/or used for this survey.

3.3.3.2 A "Report of Establishment of Survey Mark" (Description Card) on each control point established and/or used for surveying. The Description Cards shall be 5" X 8" (12.7mm X 20.3mm) with one description per card. In addition to the name or ID

number of the control points, the cards should show the adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall be delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 TASK 4: PERFORM OEW REMOVAL. This task shall be accomplished in accordance with Section C, subsection 3.2.4 of the basic contract.

3.4.1 The contractor shall provide all necessary personnel and equipment to perform surface and subsurface OEW clearance of the project site and dispose of all OEW on-site. This clearance action shall include all UXO related scrap and non-UXO related metallic scrap.

3.4.2 The contractor shall propose a planned, systematic approach to search and clear the project site that will result in optimum search effectiveness. This methodology shall be outlined in the WP.

3.4.3 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 75mm projectile at a depth of 3 feet. The contractor shall excavate to a depth of 3 feet to determine the identity of the magnetic anomaly. If deeper excavation is required, the on-site CEHND Safety Specialist will make that decision.

3.4.3.1 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a similar magnetic inert item to a depth of 3 feet and determining the standard indication. If a magnetometer does not meet the standard during the daily check, it shall be calibrated/repaired.

3.4.3.2 All access/excavation/detonation holes shall be backfilled. The contractor shall seed the backfilled areas with native vegetation or vegetation approved by TEAD-N and the CO.

3.4.4 The contractor shall maintain a detailed accounting of all OEW items/components encountered. This accounting shall include the amounts of OEW, the identification and condition, depth located, disposition and location/mapping. This accounting shall be a part of the Removal Report.

3.4.4.1 The accounting system shall also account for all demolition materials utilized to detonate OEW on-site.

3.4.4.2 The contractor shall comply with all TEAD-N regulations with regards to the issue, movement, and turn in of demolition materials.

3.4.5 The contractor shall have a contingency plan in place to provide demolition materials in the event the Government supply is depleted and/or resupply is not timely. This shall be outlined in the WP.

3.4.6 If a situation is encountered that precludes the contractor from detonating an UXO in-place, the on-site CEHND Safety Specialist will request EOD Support.

3.4.7 Activities of this task shall be video-taped in color using "Hi-grade" VHS video tape. A total of 45 to 60 minutes of footage, with an oral background describing the activities, shall be submitted on a single tape cassette.

3.5 TASK 5: TURN-IN OF RECOVERED OEW RELATED AND NON-OEW RELATED SCRAP

3.5.1 This task shall be accomplished as per Section C, subsection 3.2.5, of the basic contract.

3.5.2 The contractor shall complete a DD Form 1348-1 as turn-in documentation. Instructions for completing this form are contained in the Defense Utilization and Disposal Manual, DOD 4160.21-M. The Senior UXO Supervisor shall sign a certificate as follows:

"I certify that the property listed hereon has been inspected by me and, to the best of my knowledge and belief, contains no items of a dangerous nature."

3.5.3 DEMO turn-in documentation receipts shall be submitted as a component of the Removal Report.

3.6 TASK 6: PERFORM QUALITY CONTROL

3.6.1 The contractor shall administer a Quality Control (QC) program to manage, control, and document his own and his subcontractor's activities. The methodology to accomplish this task shall be proposed in the WP. The QC activities shall be documented and included in the Removal Report.

3.6.2 The individual performing the UXO QC shall not be involved in the performance of Task 4 above. UXO QC shall be a separate function and is not envisioned as a full-time position. The UXO QC Specialist shall meet the minimum prerequisites as outlined in Section C, subsection 3.2.4.2.

3.7 TASK 7: PREPARE AND SUBMIT REMOVAL REPORT

3.7.1 The contractor shall accomplish this task in accordance with Section C, subsection 3.2.7, of the basic contract.

3.7.2 The Final Removal Report shall consist of the following:

3.7.2.1 All original surveying and mapping data from Task 3.

3.7.2.2 Detailed accounting by listed area of all UXO and UXO-related materials located and disposed of.

3.7.2.3 A system of daily journals of all activities associated with this SOW.

3.7.2.3.1 A daily journal for each area listed in subsection 1.3 shall be opened with the start of and closed with the completion of each area. Activities endemic to the specific listed area shall be recorded on a daily basis.

3.7.2.3.2 A daily journal for the site shall be opened upon first arrival for filed operations and closed after contractor demobilization at the project site. It shall contain a daily record of which listed areas are active and of all other activities on site not endemic to any specific area.

3.7.2.4 A recapitulation of exposure data. This shall include total number of man-hours worked on site, total motor vehicle mileage, total number of flying hours, and number of flights.

3.7.2.5 QC documentation.

3.7.2.6 All DRMO turn-in documentation.

3.7.2.7 A minimum of 20 4" x 6" (10 x 15cm) color photographs shall be included in the report depicting major action items and UXO discoveries. The original, Final Report furnished to CEHND shall include original photographic print. Photographs contained in draft submissions and copies of final submissions shall be color reproductions.

3.7.2.8 Public meeting written record.

3.7.2.9 A financial breakdown by area and task of all costs and labor hours used to perform this SOW.

3.7.2.10 Video tapes. This contractor will provide two copies of video tapes, one each for CEHND-PM-OT and Tooele Army Depot.

3.7.2.11 The contractor will provide a planimetric map (at a scale no smaller than 1 inch = 200 feet [1:2400]). Upon this map the contractor shall show location of search patterns and significant findings with respect to all surface features within the project area.

3.8 Personnel Qualifications and Job Descriptions The contractor shall furnish a staff that is qualified through education, training, and pertinent experience that shall accomplish the objective and tasks of this SOW. See Section C, subsection 3.2.4.2 of the basic contract.

4.0 **SUBMITTALS** The contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.1 to each addressee listed below in the quantities indicated. The contractor shall use express mail services for delivering these plans and reports. Following each submission, comments generated as a result of the review shall be incorporated.

ADDRESSEE	COPIES
US ARMY ENGINEER DIVISION, HUNTSVILLE ATTN: CEHND-PM-OT (Mr. Ray Leone) 106 WYNN DRIVE HUNTSVILLE, AL 35805-1957	5
US ARMY CORPS OF ENGINEERS Sacramento District ATTN: CESPK-MD-MM 1325 J Street Sacramento, CA 95814-2922	3
Commander Tooele Army Depot ATTN: Industrial Risk Management SDSTE-IRE (Mr. Larry Fisher) Tooele Army Depot, UT 84074	4
Commander 548th Ord Det (EODCT) Ft. Lewis, WA 98433	2

4.1 Submittals and Due Dates

SUBMITTAL	DUE DATES (calendar days after award)
Disposal Report	20 days
Draft Work Plan	30 days
Final Work Plan	50 days
Draft Removal Report	105 days
Final Removal Report	135 days

4.2 Status Report and Telephone/Conversation Report are due monthly. The original of each of these reports shall be sent within 10 working days of the end of the reporting period by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (Mr. Leone)
106 Wynn Drive
Huntsville, AL 35805-1957

5.0 **APPLICABLE REGULATIONS** See Section C, subsection 3.2.4.4, of the basic contract.

5.1 The following publication also applies:

5.1.1 AR 385-40 with USACE Supplements, Accident Reporting and Records.

6.0 **GOVERNMENT FURNISHED**

6.1 Pertinent UXO Technical publications as required. (CEHND)

6.2 Equipment

6.2.1 Magnetometers

6.2.2 Radios

6.2.3 Demolition Materials

6.2.4 Approved Demolition Material Storage facility.

6.3 Rights of Entry

6.4 EOD support as required per paragraph 3.4.6.

7.0 SPECIAL INSTRUCTIONS

7.1 29 CFR 1926.100(a) requires personnel to wear protective helmets in areas where there is a possible danger of head injury from impact, from falling/flying objects, or from electrical shock and burns. During field activities on ordnance projects, hard hats need not be worn unless a head injury threat is present.

7.2 If a UXO is located within a grid during the final UXO QA search, the contractor will be required to, again, search the entire grid.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 1

2. AMENDMENT/MODIFICATION NO. 000701

3. EFFECTIVE DATE 07/19/93

4. REQUISITION/PURCHASE REQ. NO. PM0042-1793-0240

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7U639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the off submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDG MENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified

12. ACCOUNTING AND APPROPRIATION DATA (If required)

R0993A712 RP3673NY0180004 2132020 08-8130 P788008.11 S01110

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

X B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to Delivery Order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N) UT, is for the purpose of of adding the accounting and appropriation data in block 17 of the DD Form 1155.

b. The modified DD Form 1155 is provided. Asterisks appear in the margins before and after changes to previous issue.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)

16C. DATE SIGNED 19 Jul

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-8
Prescribed by GSA
FAR (48 CFR) 53.243

ORDER FOR SUPPLIES OR SERVICES

(Contractor must submit four copies of Invoice)

Form Approved
OMB No. 0704-0187
Expires Aug 31, 1992

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for r viewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing t collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwo Reduction Project(0704-0187), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your compl form to the procurement official identified in item 6.

1. CONTRACT/PURCH ORDER NO.	2. DELIVERY ORDER NO.	3. DATE OF ORDER.	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
DACA87-92-D-0133	0007	07/07/93	PM0042-1793-0240	

6. ISSUED BY CODE B013
U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)-955-5633

7. ADMINISTERED BY CODE EMPTY

8. DELIVERY FOB
[ ] DEST
[X] OTHER
(See Schedule

9. CONTRACTOR Vendor Id: 00011023 CODE 7W639 FACILITY CODE

NAME AND ADDRESS HUMAN FACTORS APPLICATIONS, INC
1966 BROOKE DRIVE
NEW HOPE, PA 18938-

10. DELIVER TO FOB POINT BY

11. MARK IF BUS.
[X] SMALL
[ ] SMALL DI ADVANTAG
[ ] WOMEN-OW

12. DISCOUNT TERMS
0 % 0 Net 0

13. MAIL INVOICES TO
See Block 15

14. SHIP TO CODE EMPTY
DACA8792D0133/0007

15. PAYMENT WILL BE MADE BY CODE 4003
US ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-RM-F (EXAM)
PO Box 1600
Huntsville, AL 35807-4301

MARK ALL PACKA AND PAPERS WI CONTRACT OR ORDER NUMBER

16. DELIVERY [X] This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.

PURCHASE [ ] Reference your furnish the following on terms specified here

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR SIGNATURE TYPED NAME AND TITLE DATE SIGNED

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
* R0993A712 RP3673HY0180004 2132020 08-8130 P788008.11 S01110

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICE	20. QUANTITY ORDERED/ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	Refer to D.O. 0007 and Statement of Work entitled "Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot North Area (TEAD-N), UT" dtd 25 Jun 93 (10 pg w/Figure 1) under DACA87-92-D-0133 in all correspondence. Questions relating to contract should be referred to Mary				

*If quantity accepted by the Government is same as quantity ordered, indicate by x. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
BY: Danny Biggs m09
CONTRACTING/ORDERING OFFICER

25. TOTAL 327205.

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[ ]INSPECTED [ ]RECEIVED [ ]ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE OF AUTHORIZED GOVERNMENT REP.

27. SHIP. NO.
[ ] PARTIAL
[ ] FINAL

28. D.O. VOUCHER NO.

30. INITIALS

31. PAYMENT
[ ] COMPLETE
[ ] PARTIAL
[ ] FINAL

32. PAID BY

33. AMT VERIFIED CORRECT

34. CHECK NUMBER

36. I certify this account is correct and proper for payment

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

35. BILL OF LADING NO.

37. REC'D AT	38. RECEIVED BY	39. DATE REC'D	40. TOTAL CONT.	41. S/R ACCOUNT NUMBER	42. S/R VOUCHER NO.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000702	10/25/93	PM0042-1793-0240	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to Delivery Order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N) UT, is for the purpose of realigning the cost schedule.

b. Labor is increased in the amount of $19,136.40 from $162,062.60 to $181,199.00. Materials are decreased in the amount of $19,136.40 from $65,351.00 to $46,214.60. Travel and Per Diem remains unchanged at $99,792. The total value of the delivery order remains $327,205.60.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 27 Oct 93

c. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000703	11/10/93	PM0042-17[illegible]	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

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12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP3673HY0180004 2132020 08-8130 P788008.11 2572 S01110 $53,982.01

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification 03 to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N) UT, is for the purpose of realigning increasing the total number of acres to be cleared at Tooele-North and adding in the Scope of Work, para. 1.3.2.1. Page 9, paragraph 4.1, Submittals and Due Dates, has been revised. Figure 1 is replaced by revised Figure 1.

b. Labor is increased in the amount of $34,480.01 from $181,199.00 to

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
ELIZABETH H. THEISEN		Danny Biggs	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
Elizabeth H. Theisen (Signature of person authorized to sign)	9 NOV 1993	BY [signature] (Signature of Contracting Officer)	9 Nov 93

NSN 7540-01-152-4070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 26 (REV 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

30-106

$215,679.01. Travel and Per Diem is increased in the amount of $19,502.00 from $99,792.00 to $119,294.00. Materials remains unchanged in the amount of $46,214.60. The total value of the delivery order is increased in the amount of $53,982.01 from $327,205.60 to $381,187.61.

c. The Schedule, page 2 of the Scope of work and Figure 1 are revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6400 feet to the east of the southwest corner of the installation.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the north and 250 feet to the south of the southwest corner of the installation.

* 1.3.2.3 Area C. Area C, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared.

1.3.4 The area within the southwest boundary fence consists of an Open Burn/Open Detonation (OB/OD) area and a former firing range. The OB/OD area has been used since the 1940's for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey WAS CONDUCTED by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non-OEW related scrap. The following items were found during the site visit: a large portion of what appears to be a 250 lb bomb, a 90mm HE projectile, and a 155mm base ejection projectile.

1.3.6 In January 1992, a single 155mm projectile was found off depot and moved to the OB/OD area. The item was destroyed by detonation. It is unknown at this time if the projectile was a result of over firings from the firing range or if it was a kick-out from a detonation at the OB/OD area.

1.4 <u>DEFINITIONS</u> See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 <u>TASK 1: SITE VISIT AND WORK PLAN (WP).</u> This task shall be accomplished in accordance with Section C, subsection 3.2.1, BASIC CONTRACT.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor, and shall not extend longer than 5 working days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, DRMO, Directorate of Industrial Risk Management (DIRM), Directorate of Chemical

4.1 Submittals and Due Dates

	SUBMITTAL	DUE DATES (calendar days after award)	
	Disposal Report	20 days	
	Draft Work Plan	30 days	
	Final Work Plan	50 days	
*	Draft Removal Report	185 days	*
*	Final Removal Report	215 days	*

4.2 Status Report and Telephone/Conversation Report are due monthly. The original of each of these reports shall be sent within 10 working days of the end of the reporting period by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (Mr. Leone)
106 Wynn Drive
Huntsville, AL 35805-1957

5.0 **APPLICABLE REGULATIONS** See Section C, subsection 3.2.4.4, of the basic contract.

5.1 The following publication also applies:

5.1.1 AR 385-40 with USACE Supplements, Accident Reporting and Records.

6.0 **GOVERNMENT FURNISHED**

6.1 Pertinent UXO Technical publications as required. (CEHND)

6.2 Equipment

6.2.1 Magnetometers

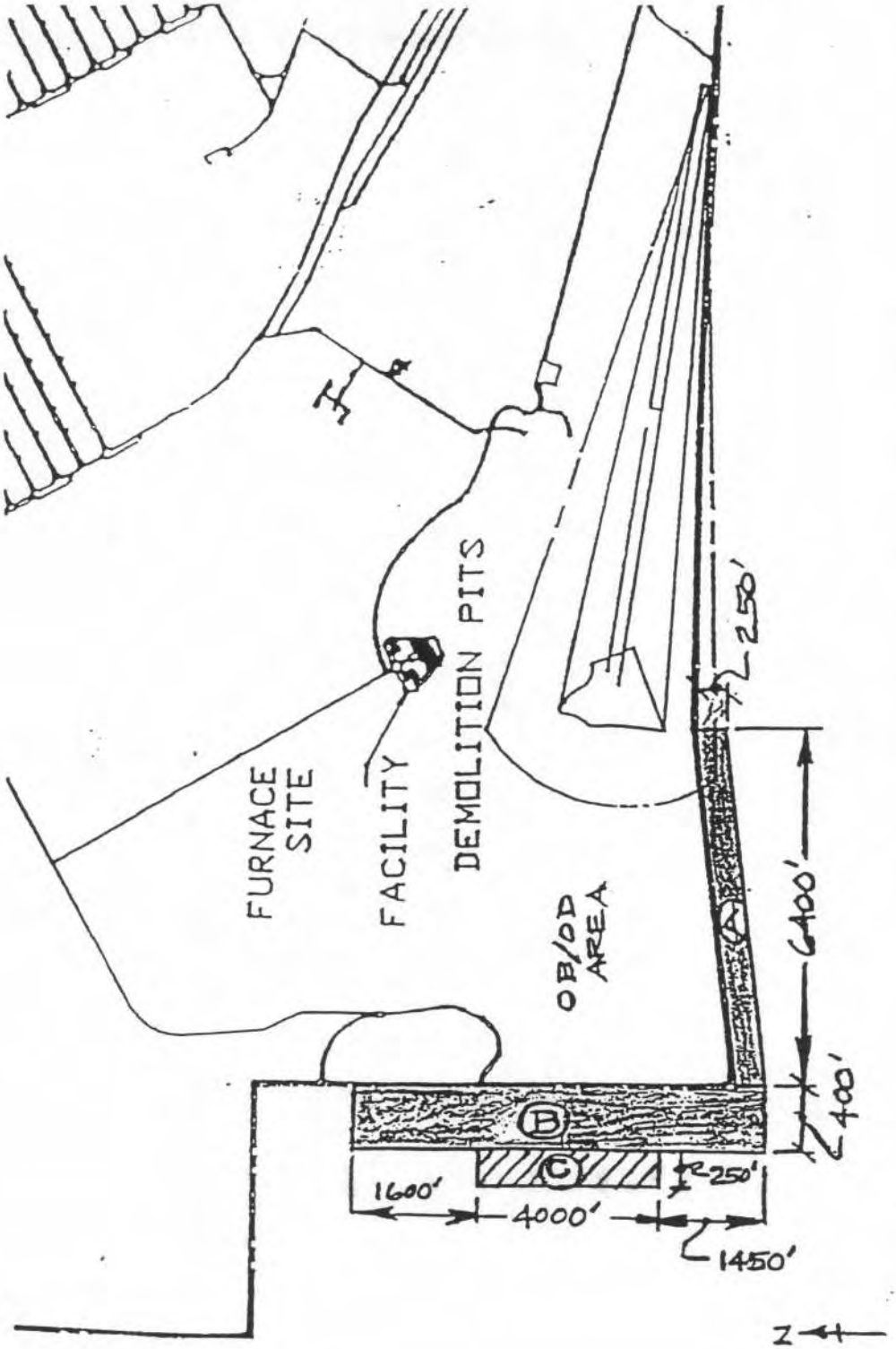
6.2.2 Radios

6.2.3 Demolition Materials

6.2.4 Approved Demolition Material Storage facility.

6.3 Rights of Entry

6.4 EOD support as required per paragraph 3.4.6.



TOOELE ARMY DEPOT - NORTH
SW CORNER
NTS

FIGURE 1
REVISED 1 NOV 93

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGE 1 4

2. AMENDMENT/MODIFICATION NO. 000704

3. EFFECTIVE DATE 11/16/93

4. REQUISITION/PURCHASE REQ. NO. PM0042-1793-0240

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority) H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification 04 to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N) UT, is for the purpose of realigning the cost schedule.

b. Labor is decreased in the amount of $1.28 from $215,679.01 to $215,677.73. Materials is increased in the amount of $1.28 from $46,214.60 to $46,215.88. Travel and Per Diem remains unchanged in the amount of $119,294.00. The total value of the order remains unchanged in the amount

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)

16C. DATE SIGNED 16 Nov 93

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

of $381,187.61.

c. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000705	05/25/94	PM0042-1793-0240	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Block 14

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification 05 to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N), UT., is for the purpose of providing additional funds and replacing the Scope of Work dated 25 Jun 93 with Scope of Work dated 4 March 1994.

b. Labor is increased in the amount of $50,364.48 from $215,677.73 to $266,042.21. Materials is increased in the amount of $4,158.55 from $46,215.88 to $50,374.43. Travel and Per Diem is increased in the amount of

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 27 May 94

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

$18,774.84 from $119,294.00 to $138,068.84. The total value of the order is increased in the amount of $73,297.87 from $381,187.61 to $454,485.48.

c. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue. The new Scope of Work entitled, "Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot North Area (TEAD-N), Utah" dated 4 March 1994.

Block 12, Accounting and Appropriation Data is as follows:

000ZP3 $73,297.87 W31RY041370004 000ZP3 21NA9320200000 78800811000 2590 S01110

SCOPE OF WORK
UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION
TOOELE ARMY DEPOT NORTH AREA (TEAD-N), UTAH

4 MARCH 1994

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration (IR). Ordnance and Explosive Waste (OEW) contamination exists on private property as a result of Department of Defense (DOD) activities.

1.1 OEW is a safety hazard and constitutes an imminent and substantial endangerment to the local populace and site personnel. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act(CERCLA), Section 104 and the National Contingency Plan, Sections 300.120(c) and 300.400(e). In accordance with the above, no Federal, State, or Local permits are required nor will be obtained for on-site disposal of OEW.

1.1.1 OEW is not classified as hazardous waste, thus, this action does not fall under the provisions of 29 CFR 1910.120.

1.1.2 This project does not require an on site, full-time contractor project manager as identified in Section C, subsection 3.1.1 of the basic contract.

1.2 Due to the inherent risk in this type of operation, the contractor shall be limited to a 40-hour work week: either five 8-hour days or four 10-hour days. UXO personnel shall not perform UXO-related tasks more than 10 hours a day.

1.3 GENERAL DESCRIPTION.

1.3.1 Tooele Army Depot is located in northwest Utah approximately 50 miles west southwest of Salt Lake City, UT. The installation contains approximately 25,000 acres. TEAD-N was established in 1942 and has been one of the major ammunition storage centers for the U.S. Army during the ensuing years. The current mission of TEAD-N is to receive, store, and dispose of munitions.

1.3.2 This SOW pertains to the following areas to be cleared of OEW and scrap located outside and adjacent to the Southwest corner of TEAD-N (see Figure 1).

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6,400 feet along the southern border of the installation and will be cleared to a depth of 3 feet.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the North and 250 feet to the South of the Southwest corner of the installation, and will be cleared to a depth of 3 feet.

1.3.2.3 Area C. Area C, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

1.3.2.4 Area D. Area D, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

1.3.2.5 Area E. Area E, which will consist of a total area of 60 acres, will be surface cleared and located by the CEHND Safety Specialist in the field.

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1 of the Basic Contract.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor, and shall not extend longer than 5 working days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, Defense Reutilization and Marketing Office (DRMO), Directorate of Industrial Risk Management (DIRM), Directorate of Chemical Munitions and Ammunition Operations, and Medical Facility. Coordination shall also be made with the Federal Aviation Administration (FAA) to ensure local air clearance. No UXO related activities will be performed during the site visit. The contractor shall coordinate with the TEAD-N Security Office (801-833-2713) prior to the site visit. The schedule for the site visit shall be coordinated with the USAEDH Project Manager (Mr. Ray Leone, (205-955-1243)) at least 10 days in advance.

3.1.2 Disposal Alternatives. Based on the site visit, the contractor shall describe feasible alternatives for disposal and recommend the safest and most cost effective method of treatment and disposal of the explosive ordnance, inert ordnance, explosive, and debris. This letter proposal shall be forwarded to the contracting officer (CO). The method of treatment will be selected and approved by the CO after which the contractor will then proceed with preparation of the WP.

3.1.3 Work Plan (WP). The contractor shall prepare and submit a site-specific WP to the Government for approval prior to beginning any UXO-related activities on the site. The WP shall outline the contractor's proposed methodology for accomplishing the objective and following tasks. This shall include site-specific training, UXO-related procedures and practices, equipment, administrative area and equipment, demolition materials and their security and accountability system, personal protective equipment, internal and external communications systems, responsibilities of project personnel, resumes of all UXO personnel and key non UXO personnel, on-site and off-site medical facilities and emergency response actions to include transportation, and the completion of ENG Form 3394 in the event of an accident, daily work schedule, project time line, UXO safety and site general safety. All UXO-related procedures shall comply with *CEHND Safety Concepts and Basic Considerations* for UXO. The WP shall include, as a minimum, the following subplans. See Section C, subsection 3.2.1 of the basic contract for detailed requirements.

3.1.3.1 UXO Operational Plan.

3.1.3.2 Accident Prevention Plan (See Section J, Attachment 4 of basic contract.).

3.1.3.3 Equipment Plan.

3.1.3.4 Surveying and Mapping Plan.

3.1.3.5 Environmental Protection Plan (See Section C, subsection 5.0 of the basic contract.).

3.1.3.6 Quality Control Plan.

3.1.3.7 Work, Data, and Cost Management Plan.

3.1.3.8 Other subplans identified in Section C, subsection 3.2.1 of the basic contract are not required for this delivery order.

3.1.4 Contractor shall notify the PM at least 10 days prior to mobilization.

3.2 TASK 2: PERFORM COMMUNITY RELATIONS. This task shall be accomplished in accordance Section C, subsection 3.2.3, of the basic contract.

3.2.1 The contractor shall assist, if requested, in arranging a local public meeting to inform the public of the purpose of this clearance, the procedures to be followed, and the cooperation requested.

3.2.2 All press releases and media appearances shall be coordinated with and approved by the Public Affairs Officer (PAO), TEAD-N.

3.2.3 A written record of the public meeting attendees, questions, and answers shall be provided as part of the final report.

3.2.4 Public Affairs. The contractor shall not make available or publicly disclose any data generated or reviewed under this contract or any subcontract unless specifically authorized by the CO and the TEAD-N PAO. When approached by any person or entity requesting information about the subject of this contract, the contractor shall defer to PAO for response. Reports and data generated under this contract shall become the property of the

Government and distribution to any other source by the contractor is prohibited unless authorized by the CO.

3.3 TASK 3: PERFORM LOCATION SURVEYS AND MAPPING.

3.3.1 All surveying or mapping crews shall be escorted by an UXO Supervisor. A magnetometer shall be used to survey the location for the establishment of any monuments or markers.

3.3.2 As needed, the contractor shall survey and establish the boundaries of areas stated under subsection 1.3 of this SOW. The contractor shall mark the corners and outer edges of the designated areas with stakes or other visible temporary markers.

3.3.3 Items and data to be submitted to CEHND as part of this task are as follows:

3.3.3.1 A tabulated list of all control points showing the adjusted coordinates established and/or used for this survey.

3.3.3.2 A "Report of Establishment of Survey Mark" (Description Card) on each control point established and/or used for surveying. The Description Cards shall be 5" X 8" (12.7mm X 20.3mm) with one description per card. In addition to the name or ID number of the control points, the cards should show the adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall be delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 TASK 4: PERFORM OEW REMOVAL. This task shall be accomplished in accordance with Section C, subsection 3.2.4 of the basic contract.

3.4.1 The contractor shall provide all necessary personnel and equipment to perform surface and subsurface OEW clearance of Area A and surface clearance of Areas B & C of the project site and dispose of all OEW on site. This clearance action shall include all UXO-related scrap and non UXO-related metallic scrap.

3.4.2 The contractor shall propose a planned, systematic approach to search and clear the project site that will result in

optimum search effectiveness. This methodology shall be outlined in the WP.

3.4.3 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 75mm projectile at a depth of 3 feet. The contractor shall excavate to a depth of 3 feet to determine the identity of the magnetic anomaly. If deeper excavation is required, the on-site CEHND Safety Specialist will make that decision.

3.4.3.1 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a similar magnetic inert item to a depth of 3 feet and determining the standard indication. If a magnetometer does not meet the standard during the daily check, it shall be calibrated/repaired.

3.4.3.2 All access/excavation/detonation holes shall be back-filled. The contractor shall seed the backfilled areas with native vegetation or vegetation approved by TEAD-N and the CO.

3.4.4 The contractor shall maintain a detailed accounting of all OEW items/components encountered. This accounting shall include the amounts of OEW, the identification and condition, depth located, disposition and location/mapping. This accounting shall be a part of the Removal Report.

3.4.4.1 The accounting system shall also account for all demolition materials utilized to detonate OEW on site.

3.4.4.2 The contractor shall comply with all TEAD-N regulations with regards to the issue, movement, and turn in of demolition materials.

3.4.5 The contractor shall have a contingency plan in place to provide demolition materials in the event the Government supply is depleted and/or resupply is not timely. This shall be outlined in the WP.

3.4.6 If a situation is encountered that precludes the contractor from detonating an UXO in place, the on-site CEHND Safety Specialist will request EOD Support.

3.4.7 Activities of this task shall be video-taped in color using "Hi-grade" VHS video tape. A total of 45 to 60 minutes of

footage, with an oral background describing the activities, shall be submitted on a single tape cassette.

3.5 TASK 5: TURN IN OF RECOVERED OEW-RELATED AND NON OEW-RELATED SCRAP.

3.5.1 This task shall be accomplished as per Section C, subsection 3.2.5, of the basic contract.

3.5.2 The contractor shall complete a DD Form 1348-1 as turn-in documentation. Instructions for completing this form are contained in the Defense Utilization and Disposal Manual, DOD 4160.21-M. The Senior UXO Supervisor shall sign a certificate as follows:

"I certify that the property listed hereon has been inspected by me and, to the best of my knowledge and belief, contains no items of a dangerous nature."

3.5.3 DRMO turn-in documentation receipts shall be submitted as a component of the Removal Report.

3.6 TASK 6: PERFORM QUALITY CONTROL.

3.6.1 The contractor shall administer a Quality Control (QC) program to manage, control, and document his own and his subcontractor's activities. The methodology to accomplish this task shall be proposed in the WP. The QC activities shall be documented and included in the Removal Report.

3.6.2 The individual performing the UXO QC shall not be involved in the performance of Task 4 above. UXO QC shall be a separate function and is not envisioned as a full-time position. The UXO QC Specialist shall meet the minimum prerequisites as outlined in Section C, subsection 3.2.4.2.

3.7 TASK 7: PREPARE AND SUBMIT REMOVAL REPORT.

3.7.1 The contractor shall accomplish this task in accordance with Section C, subsection 3.2.7, of the basic contract.

3.7.2 The Final Removal Report shall consist of the following:

3.7.2.1 All original surveying and mapping data from Task 3.

3.7.2.2 Detailed accounting by listed area of all UXO and UXO-related materials located and disposed of.

3.7.2.3 A system of daily journals of all activities associated with this SOW.

3.7.2.3.1 A daily journal for each area listed in subsection 1.3 shall be opened with the start of and closed with the completion of each area. Activities endemic to the specific listed area shall be recorded on a daily basis.

3.7.2.3.2 A daily journal for the site shall be opened upon first arrival for filed operations and closed after contractor demobilization at the project site. It shall contain a daily record of which listed areas are active and of all other activities on site not endemic to any specific area.

3.7.2.4 A recapitulation of exposure data. This shall include total number of man-hours worked on site, total motor vehicle mileage, total number of flying hours, and number of flights.

3.7.2.5 QC documentation.

3.7.2.6 All DRMO turn-in documentation.

3.7.2.7 A minimum of 20 4" x 6" (10 x 15cm) color photographs shall be included in the report depicting major action items and UXO discoveries. The original, Final Report furnished to CEHND shall include original photographic print. Photographs contained in draft submissions and copies of final submissions shall be color reproductions.

3.7.2.8 Public meeting written record.

3.7.2.9 A financial breakdown by area and task of all costs and labor hours used to perform this SOW.

3.7.2.10 Video tapes. This contractor will provide two copies of video tapes, one each for CEHND-PM-OT and Tooele Army Depot.

3.7.2.11 The contractor will provide a planimetric map (at a scale no smaller than 1 inch = 200 feet [1:2400]). Upon this map the contractor shall show location of search patterns and significant findings with respect to all surface features within the project area.

3.8 Personnel Qualifications and Job Descriptions. The contractor shall furnish a staff that is qualified through educa

tion, training, and pertinent experience that shall accomplish the objective and tasks of this SOW. See Section C, subsection 3.2.4.2 of the basic contract.

4.0 SUBMITTALS: The contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.1 to each addressee listed below in the quantities indicated. The contractor shall use express mail services for delivering these plans and reports. Following each submission, comments generated as a result of the review shall be incorporated.

ADDRESSEE	COPIES
US ARMY ENGINEER DIVISION, HUNTSVILLE ATTN: CEHND-PM-OT (Mr. Ray Leone) 106 WYNN DRIVE HUNTSVILLE, AL 35805-1957	5
US ARMY CORPS OF ENGINEERS Sacramento District ATTN: CESPK-MD-MM 1325 J Street Sacramento, CA 95814-2922	2
Commander Tooele Army Depot ATTN: Industrial Risk Management SDSTE-IRE (Mr. Larry Fisher) Tooele Army Depot, UT 84074	4
Commander 548th Ord Det (EODCT) Ft. Lewis, WA 98433	1

4.1 Submittals and Due Dates

SUBMITTAL	DUE DATES (calendar days after award)
Disposal Letter	20 days
Draft Work Plan	45 days
Final Work Plan	65 days

Draft Addendum to Work Plan	10 calendar days after receipt of Modification 05
Final Addendum to Work Plan	20 calendar days after receipt of Modification 05
Draft Removal Report	30 days after completion of field work
Final Removal Report	20 days after receipt of comments

4.2 Status Report and Telephone/Conversation Report are due monthly. The original of each of these reports shall be sent within 10 working days of the end of the reporting period by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (Mr. Leone)
106 Wynn Drive
Huntsville, AL 35805-1957

5.0 APPLICABLE REGULATIONS. See Section C, subsection 3.2.4.4, of the basic contract.

5.1 The following publication also applies:

5.1.1 AR 385-40 with USACE Supplements, Accident Reporting and Records.

6.0 GOVERNMENT FURNISHED.

6.1 Pertinent UXO Technical publications as required. (CEHND)

6.2 Equipment - The contractor shall contact the Government Property Manager at telephone number 205-955-5656 to determine the availability of Government Furnished Property (GFE).

6.3 Demolition Materials.

6.4 Approved Demolition Material Storage facility.

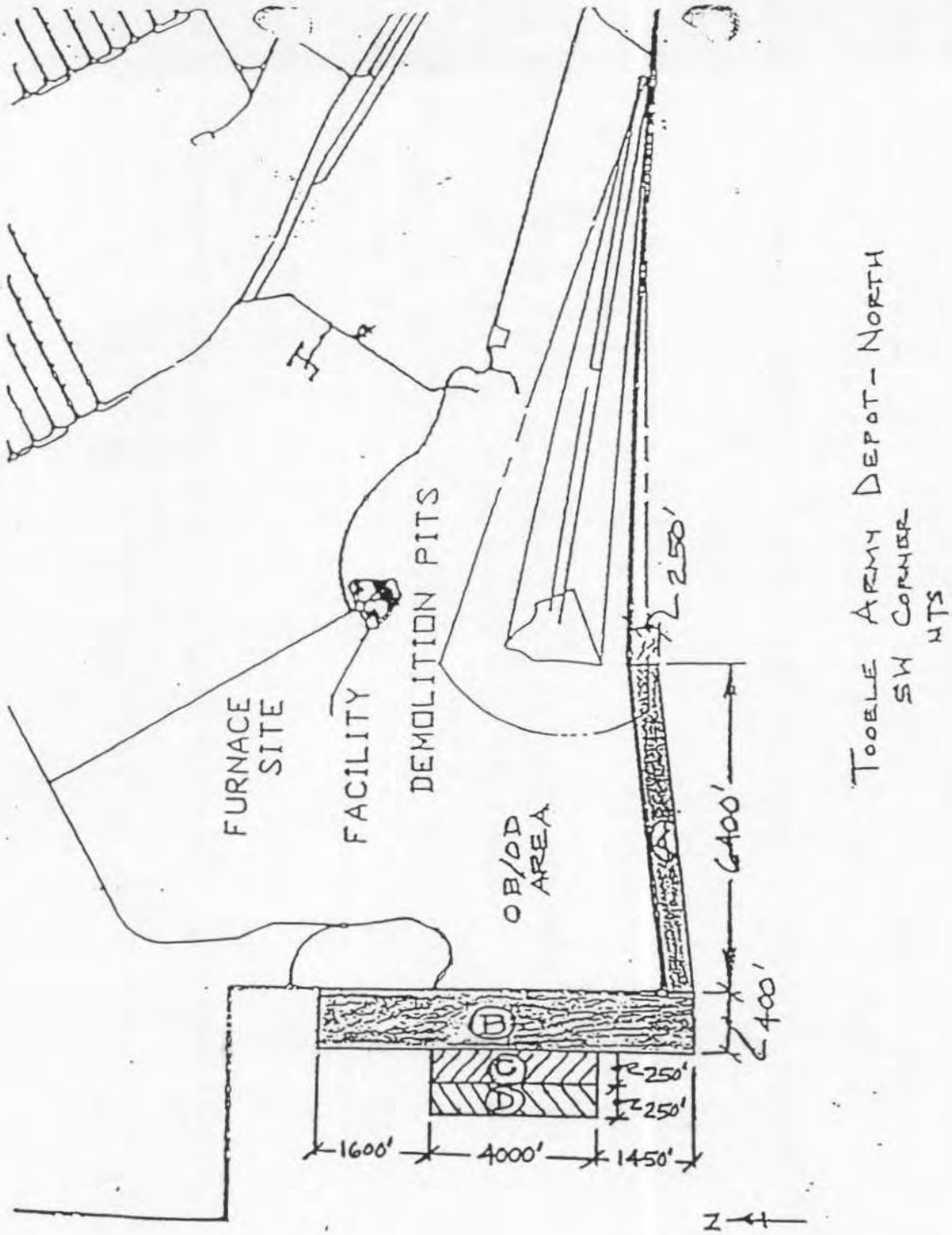
6.5 Rights of Entry.

6.6 EOD support as required per paragraph 3.4.6.

7.0 SPECIAL INSTRUCTIONS.

7.1 29 CFR 1926.100(a) requires personnel to wear protective helmets in areas where there is a possible danger of head injury from impact, from falling/flying objects, or from electrical shock and burns. During field activities on ordnance projects, hard hats need not be worn unless a head injury threat is present.

7.2 If a UXO is located within a grid during the final UXO QA search, the contractor will be required to, again, search the entire grid.



TOOELE ARMY DEPOT - NORTH
SW CORNER
NTS

FIGURE 1
REVISED 5 FEB 94

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000706	06/09/94	PM0042-1793-0240	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X

10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT N REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N), UT., is for the purpose of realigning funds.

b. Labor is increased in the amount of $4,210.11 from $266,042.21 to $270,252.32. Materials are decreased in the amount of $4,210.11 from $50,374.43 to $46,164.32. Travel and Per Diem remains unchanged in the amount of $138,068.84. The total amount of the order remains unchanged

cept as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mary M. Dowling	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY Mary M. Dowling (Signature of Contracting Officer)	16C. DATE SIGNED 9 Jun 94

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

in the amount of $454,485.48.

c. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000707	06/14/94	PM0042-1793-0240	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
FAR 52.243-0003, Changes

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N), UT., is for the purpose of revising Section C, paragraph 1.3.2.4 and deleting paragraph 1.3.2.5. Figure 1 sketch has been revised.

b. Page 2 is replaced by revised page 2. Figure 1 Sketch dated 5 Feb 94 is replaced by revised sketch dated 9 Jun 94. Asterisks appear in the margins before and after changes to previous issue. All other terms and

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 14 Jun 9

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

conditions remain unchanged.

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6,400 feet along the southern border of the installation and will be cleared to a depth of 3 feet.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the North and 250 feet to the South of the Southwest corner of the installation, and will be cleared to a depth of 3 feet.

1.3.2.3 Area C. Area C, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

* 1.3.2.4 Area D. Area D, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 400 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet. Work in Area D will halt at close of business on 30 June 1994. *

* 1.3.2.5 Deleted. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

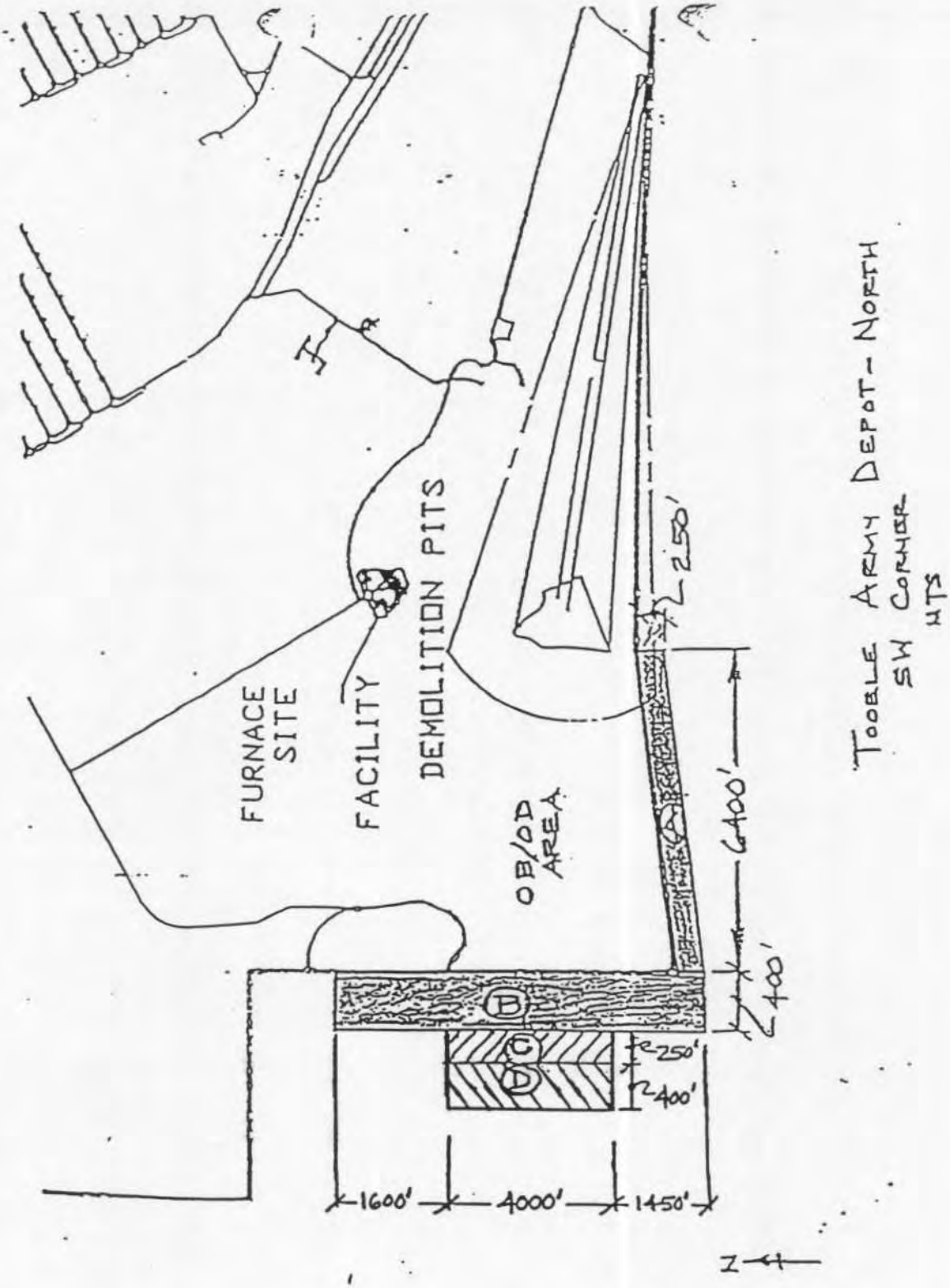


FIGURE 1
REVISED 9 JUNE 94

DACA87-92-D-0133
Delivery Order 0007 Mod 07

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAG
	1 1

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
000708	06/20/94	PM0042-1793-0240	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

4950 RTE 202, BLDG 1, STE 2A
HOLICONG PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007

10B. DATED (SEE ITEM 13) 07/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offe submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDG MENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram c letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N), is for the purpose of revising page 2, paragraph 1.3.2.4 of the Scope of Work and replacing Figure 1 dated 9 Jun 94 with Figure 1 dated 17 Jun 94.

b. All other terms and conditions remain unchanged. Asterisks appear in the margins before and after changes to previous issue.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNE 20 Jun 9

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6,400 feet along the southern border of the installation and will be cleared to a depth of 3 feet.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the North and 250 feet to the South of the Southwest corner of the installation, and will be cleared to a depth of 3 feet.

1.3.2.3 Area C. Area C, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

* 1.3.2.4 Area D. Area D, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 600 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

Area dimensions are maximum dimensions. Because funds for this project will be depleted at close of business on 30 June 94, at which time HFA will return to Tooele-South to complete that project, the on-site Safety Specialist may identify a smaller parcel or parcels to be cleared with remaining funds. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

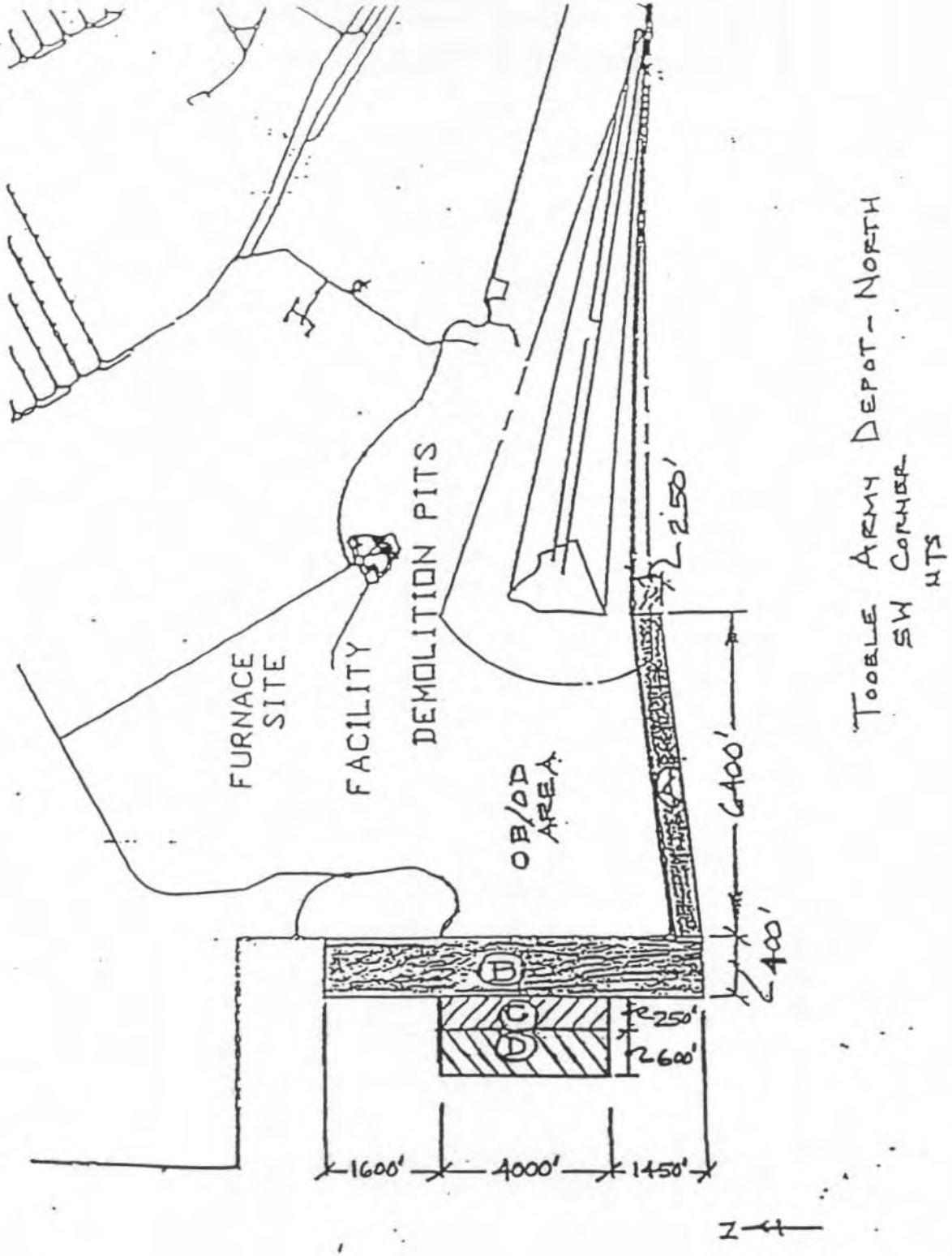


FIGURE 1
REVISED 17 JUNE 94

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To Robert Bailey	From Meg Ernst
Co. Contracting	Co. HFA Inc
Dept.	Phone #
Fax #	Fax #

AMENDMENT OF SOLICITATION/MODIFICATION OF CON

2. AMENDMENT/MODIFICATION NO. 000709	3. EFFECTIVE DATE 06/29/94
4. ISSUED BY CODE	8013

U.S. ARMY ENG. DIV., HUNTSVILLE
ATTN: CERND-CT-O/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

5. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023		(X)	9A. AMENDMENT OF SOLICITATION NO.
HUMAN FACTORS APPLICATIONS, INC			9B. DATED (SEE ITEM 11)
4950 RTE 202, BLDG 1, STE 2A HOLICONG PA 18938*		X	10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0007
			10B. DATED (SEE ITEM 13) 07/07/93
CODE 7U639	FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP3673HY0180004 2132820 06-8130 P788008.11 2572 S01110 INCREASE $88,304.81

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	FAR 52.243-1, CHANGES
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0007, Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, North Area (TEAD-N), UT., is for the purpose of revising Section C, to add paragraph 1.3.2.5. Figure 1 sketch has been revised.

b. Page 2 is replaced by revised page 2. Figure 1 Sketch dated 17 Jun 94 is replaced by revised sketch dated 20 Jun 94. Asterisks appear in the margins before and after changes to

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) ELIZABETH H. THEISEN, President		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR Elizabeth H. Theisen (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY Danny Biggs (Signature of Contracting Officer)	16C. DATE SIGNED 30 Jun

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-106

STANDARD FORM 30 (REV. 10-
Prescribed by GSA
FAR (48 CFR) 53.243

previous issue. All other terms and conditions remain unchanged.

c. Labor is increased in the amount of $33,409.89 from $270,252.32 to $303,662.21. Materials are increased in the amount of $17,450.31 from $46,164.32 to $63,614.63. Travel and Per Diem is increased in the amount of $37,444.61 from the current total of $138,068.84 to a new total of $175,513.45. The total amount of the order is increased by $88,304.81 from the current total of $454,485.48 to a new total of $542,790.29.

d. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

1.3.2.1 Area A. Area A, which is 250 feet wide, extends 6,400 feet along the southern border of the installation and will be cleared to a depth of 3 feet.

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 6800 feet to the North and 250 feet to the South of the Southwest corner of the installation, and will be cleared to a depth of 3 feet.

1.3.2.3 Area C. Area C, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 250 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

1.3.2.4 Area D. Area D, which begins 1200 feet to the North of the Southwest corner of TEAD-N, is 600 feet wide and proceeds 4000 feet to the North, and will be cleared to a depth of 3 feet.

* 1.3.2.5 Area E. Area E, which is directly to the West of Area D, is 1000 feet wide and 4000 feet long (see Figure 1, attached). The On-Site Safety Specialist will direct the Contractor to concentrate on sub-areas of Area E if all of Area E cannot be cleared to a depth of 3 feet before project funds run out. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

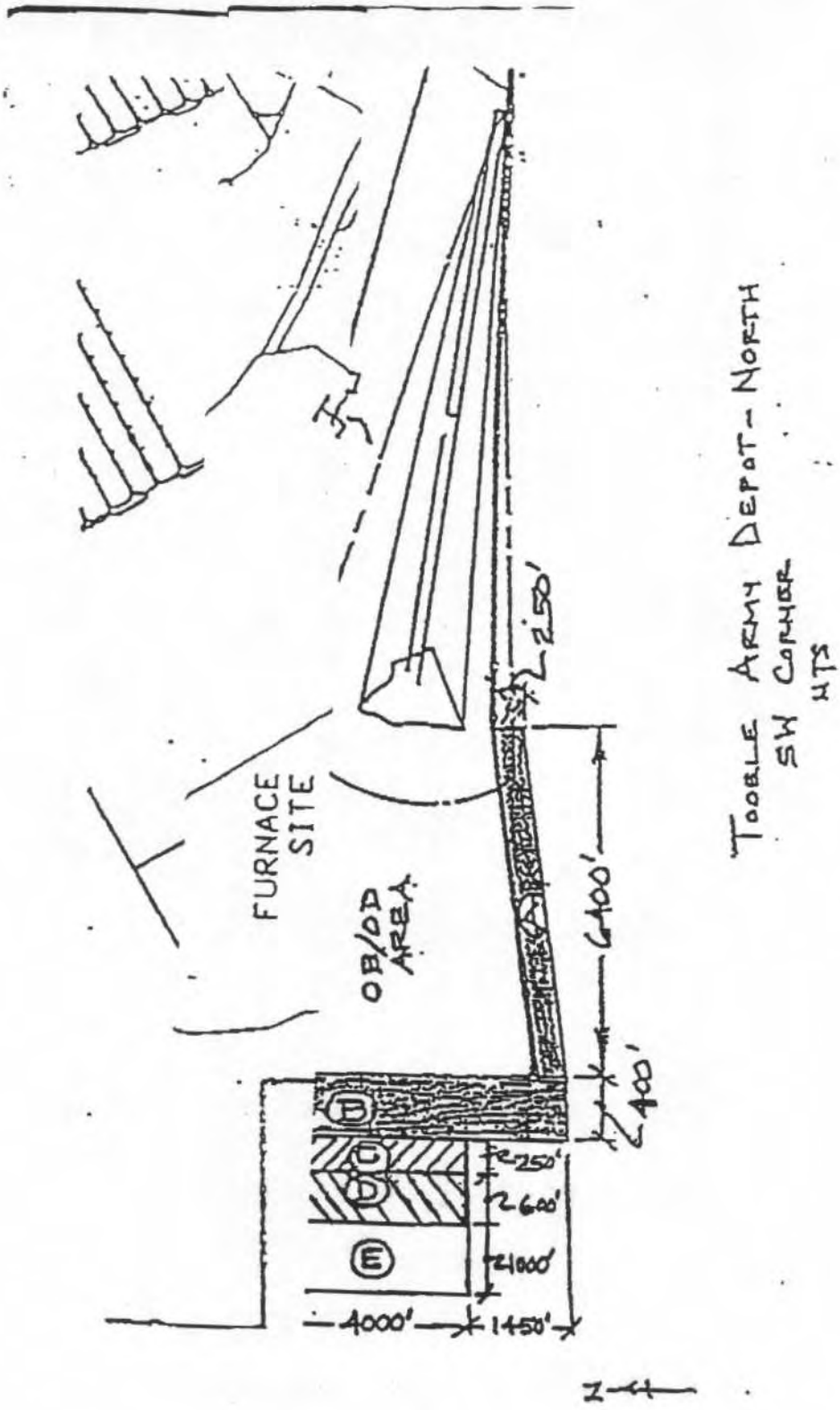


FIGURE 1
REVISED 20 JUNE 94

17-92-D-013
very Order

APPENDIX B

SCOPE OF WORK
DELIVERY ORDER #10

08 '93 08:45AM USA COE HSV USAEDH-CT 2059551358

...R FOR SUPPLIES OR SERVICES

...ontractor must submit four copies of Invoice)

Form Approved
OMB No. 0704-0187
Expires Aug 31, 1992

PP. 1/16

4

...eporting burden for this collection of informati... instructions, searching existing data sources, ...ction of information. Send comments regarding this ...uding suggestions for reducing this burden, to Washi... ...orts, 1215 Jefferson Davis Highway, Suite 1204, Arlin... ...duction Project(0704-0187), Washington, DC 20503. Plea... ...ore to the procurement official identified in item 6.

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 16

To Elizabeth Therin	From Mary Stringer
Co. HFA	Co. CE
Dept.	Phone #
Fax # 215-794-7353	Fax #

...for re... ...wing the ...ion, ...s and ...perwork ...completed

...TY

CONTRACT/PURCH ORDER NO.	2. DELIVERY ORDER NO.
DACA87-92-D-0133	0010

4. ISSUED BY CODE 8013
...S. ARMY ENG. DIV., HUNTSVILLE
...TTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
...ry F. Stringer C14 (205)-955-5633

8. DELIVERY FOB
[ ] DEST
[X] OTHER
(See Schedule)

. CONTRACTOR Vendor Id: 00011023 CODE 7W639 FACILITY CODE

10. DELIVER TO FOB POINT BY

11. MARK IF BUS. IS
[X] SMALL
[ ] SMALL DIS-ADVANTAGED
[ ] WOMEN-OWNED

...ME AND ...DDRESS HUMAN FACTORS APPLICATIONS, INC
1966 BROOKE DRIVE
NEW HOPE, PA 18938-

12. DISCOUNT TERMS
0 % 0 Net 0

13. MAIL INVOICES TO
See Block 15

. SHIP TO CODE EMPTY

ACA8792D0133/0010

15. PAYMENT WILL BE MADE BY CODE 4003
US ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-RM-F (EXAM)
PO Box 1600
Huntsville, AL 35807-4301

MARK ALL PACKAGES AND PAPERS WITH CONTRACT OR ORDER NUMBER

6. DELIVERY [X] This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.

PURCHASE [ ] Reference your furnish the following on terms specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN ...R IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED

If this box is marked, supplier must sign Acceptance and return the following number of copies:

. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
R1193A880 RP3673HY0180004 2132020 08-8130 P788008.11 2572 S01110 Dr

ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICE	20. QUANTITY ORDERED/ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	Refer to DO 0010 and Statement of Work entitled, "Unexploded Ordnance (UXO) Removal Action, Tooele Army Depot, South Area (TEAD-S), UT" (10 pages w/2 sketch) under DACA87-92-D-0133 in all corres. Questions relating to contract should be referred to Mary Stringer 205-955-5633.				

...r quantity accepted by the Government ...s same as quantity ordered, indicate ...x. If different, enter actual ...ntity accepted below quantity ...ered and encircle.

24. UNITED STATES OF AMERICA
BY: Danny Biggs e09 Danny Biggs
CONTRACTING/ORDERING OFFICER

25. TOTAL 376608.00

29. DIFFERENCES

. QUANTITY IN COLUMN 20 HAS BEEN
...NSPECTED [ ]RECEIVED [ ]ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

...ATE SIGNATURE OF AUTHORIZED GOVERNMENT REP.

...I certify this account is correct and proper for payment

...ATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

27. SHIP. NO.
[ ] PARTIAL
[ ] FINAL

28. D.O. VOUCHER NO.

30. INITIALS

31. PAYMENT
[ ] COMPLETE
[ ] PARTIAL
[ ] FINAL

32. PAID BY

33. AMT VERIFIED CORRECT FOR

34. CHECK NUMBER

35. BILL OF LADING NO.

...RECID AT | 38. RECEIVED BY | 39. DATE RECID | 40. TOTAL CONT. | 41. S/R ACCOUNT NUMBER | 42. S/R VOUCHER NO.

SCOPE OF WORK
UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION
TOOELE ARMY DEPOT SOUTH AREA (TEAD-S), UTAH

10 AUGUST 1993

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration (IR). Ordnance and Explosive Waste (OEW) contamination exists on private property as a result of Department of Defense (DOD) activities.

1.1 OEW is a safety hazard and constitutes an imminent and substantial endangerment to the local populace and site personnel. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 104 and the National Contingency Plan, Sections 300.120(c) and 300.400(e). In accordance with the above, no Federal, State, or Local permits are required nor will be obtained for on-site disposal of OEW.

1.1.1 This action does not fall under the provisions of 29 CFR 1910.120.

1.1.2 This project does not require an on site, full-time contractor project manager as identified in Section C, subsection 3.1.1 of the basic contract.

1.2 Due to the inherent risk in this type of operation, the contractor shall be limited to a 40-hour work week: either five 8-hour days or four 10-hour days. UXO personnel shall not perform UXO-related tasks more than 10 hours a day.

1.3 GENERAL DESCRIPTION.

1.3.1 Tooele Army Depot is located in northwest Utah approximately 50 miles west southwest of Salt Lake City, UT. The installation contains approximately 25,000 acres. TEAD-S was established in 1942 and has been one of the major chemical ammunition storage centers for the U.S. Army during the ensuing years. The current mission of TEAD-S is to receive, store, and dispose of chemical munitions.

1.3.2 This SOW pertains to the following areas to be cleared of OEW and scrap located outside and adjacent to the southern installation boundary of TEAD-S (see encl 1).

1.3.2.1 Area A. Area A, which is 200 feet wide, extends 20,600 feet along the southern border of the installation. (See encl 2).

1.3.2.2 Area B. Area B, which is 400 feet wide, extends 4800 feet along the southern border of Area A mentioned above. (See encl 2).

1.3.2.3 Area C. Area C, which is 400 feet wide, extends 6,600 feet along the southern border of Area A mentioned above. (See encl 2).

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1.

3.1.1 Site Visit. The site visit will be accomplished by no more than two contractor representatives from the TEAD-N project site, one of which will be a Senior UXO Supervisor, and shall not exceed 2 working days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, Defense Reutilization and Marketing Office (DRMO), Directorate of Industrial Risk Manage- ment (DIRM), Directorate of Chemical Munitions and Ammunition Operations, and Medical Facility. Coordination shall also be made with the Federal Aviation Administration (FAA) to ensure local air clearance. No UXO related activities will be performed during the site visit. The contractor shall coordinate with the TEAD-N Security Office (801-833-2713) prior to the site visit. The

schedule for the site visit shall be coordinated with the USAEDH Project Manager (Mr. Ray Leone, (205-955-1243)) at least 10 days in advance.

3.1.2 Disposal Alternatives. Based on the site visit, the contractor shall describe feasible alternatives for disposal and recommend the safest and most cost effective method of treatment and disposal of the explosive ordnance, inert ordnance, explosive, and debris. This letter proposal shall be forwarded to the contracting officer (CO). The method of treatment will be selected and approved by the CO after which the contractor will then proceed with preparation of the WP.

3.1.3 Work Plan (WP). The contractor shall prepare and submit a site-specific WP to the Government for approval prior to beginning any UXO-related activities on the site. This WP will be an addendum to the WP for the TEAD-N OEW removal project. The WP shall outline the contractor's proposed methodology for accomplishing the objective and following tasks. This shall include site-specific training, UXO-related procedures and practices, equipment, administrative area and equipment, demolition materials and their security and accountability system, personal protective equipment, internal and external communications systems, responsibilities of project personnel, resumes of all UXO personnel and key non UXO personnel, on-site and off-site medical facilities and emergency response actions to include transportation, and the completion of ENG Form 3394 in the event of an accident, daily work schedule, project time line, UXO safety and site general safety. All UXO-related procedures shall comply with *CEHND Safety Concepts and Basic Considerations* for UXO. The WP shall include, as a minimum, the following subplans. See Section C, subsection 3.2.1 of the basic contract for detailed requirements.

3.1.3.1 UXO Operational Plan.

3.1.3.2 Accident Prevention Plan (See Section J, Attachment 4 of basic contract.).

3.1.3.3 Equipment Plan.

3.1.3.4 Surveying and Mapping Plan.

3.1.3.5 Environmental Protection Plan (See Section C, subsection 5.0 of the basic contract.).

3.1.3.6 Quality Control Plan.

3.1.3.7 Work, Data, and Cost Management Plan.

3.1.3.8 Other subplans identified in Section C, subsection 3.2.1 of the basic contract are not required for this delivery order.

3.1.4 Contractor shall notify the PM at least 10 days prior to mobilization.

3.2 TASK 2: PERFORM COMMUNITY RELATIONS. This task shall be accomplished in accordance Section C, subsection 3.2.3, of the basic contract.

3.2.1 The contractor shall assist, if requested, in arranging a local public meeting to inform the public of the purpose of this clearance, the procedures to be followed, and the cooperation requested.

3.2.2 All press releases and media appearances shall be coordinated with and approved by the Public Affairs Officer (PAO), TEAD-N.

3.2.3 A written record of the public meeting attendees, questions, and answers shall be provided as part of the final report.

3.2.4 Public Affairs. The contractor shall not make available or publicly disclose any data generated or reviewed under this contract or any subcontract unless specifically authorized by the CO and the TEAD-N PAO. When approached by any person or entity requesting information about the subject of this contract, the contractor shall defer to PAO for response. Reports and data generated under this contract shall become the property of the Government and distribution to any other source by the contractor is prohibited unless authorized by the CO.

3.3 TASK 3: PERFORM LOCATION SURVEYS AND MAPPING.

3.3.1 All surveying or mapping crews shall be escorted by an UXO Supervisor. A magnetometer shall be used to survey the location for the establishment of any monuments or markers.

3.3.2 As needed, the contractor shall survey and establish the boundaries of areas stated under subsection 1.3 of this SOW. The contractor shall mark the corners and outer edges of the desig-nated areas with stakes or other visible temporary markers.

3.3.3 Items and data to be submitted to CEHND as part of this task are as follows:

3.3.3.1 A tabulated list of all control points showing the adjusted coordinates established and/or used for this survey.

3.3.3.2 A "Report of Establishment of Survey Mark" (Description Card) on each control point established and/or used for surveying. The Description Cards shall be 5" X 8" (12.7mm X 20.3mm) with one description per card. In addition to the name or ID number of the control points, the cards should show the

adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 **TASK 4: PERFORM OEW REMOVAL.** This task shall be accomplished in accordance with Section C, subsection 3.2.4 of the basic contract.

3.4.1 The contractor shall provide all necessary personnel and equipment to perform surface and subsurface OEW clearance of Area A and surface clearance of Areas B & C of the project site and dispose of all OEW on site. This clearance action shall include all UXO-related scrap and non UXO-related metallic scrap.

3.4.2 The contractor shall propose a planned, systematic approach to search and clear the project site that will result in optimum search effectiveness. This methodology shall be outlined in the WP.

3.4.3 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 75mm projectile at a depth of 3 feet. The contractor shall excavate to a depth of 3 feet to determine the identity of the magnetic anomaly. If deeper excavation is required, the on-site CEHND Safety Specialist will make that decision.

3.4.3.1 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a similar magnetic inert item to a depth of 3 feet and determining the standard indication. If a magnetometer does not meet the standard during the daily check, it shall be calibrated/repaired.

3.4.3.2 All access/excavation/detonation holes shall be back-filled. The contractor shall seed the backfilled areas with native vegetation or vegetation approved by TEAD-N and the CO.

3.4.4 The contractor shall maintain a detailed accounting of all OEW items/components encountered. This accounting shall include the amounts of OEW, the identification and condition, depth located, disposition and location/mapping. This accounting shall be a part of the Removal Report.

3.4.4.1 The accounting system shall also account for all demolition materials utilized to detonate OEW on site.

3.4.4.2 The contractor shall comply with all TEAD-N regulations with regards to the issue, movement, and turn in of demolition materials.

3.4.5 The contractor shall have a contingency plan in place to provide demolition materials in the event the Government supply is depleted and/or resupply is not timely. This shall be outlined in the WP.

3.4.6 If a situation is encountered that precludes the contractor from detonating an UXO in place, the on-site CEHND Safety Specialist will request EOD Support.

3.4.7 Activities of this task shall be video-taped in color using "Hi-grade" VHS video tape. A total of 45 to 60 minutes of footage, with an oral background describing the activities, shall be submitted on a single tape cassette.

3.5 TASK 5: TURN IN OF RECOVERED OEW-RELATED AND NON OEW-RELATED SCRAP.

3.5.1 This task shall be accomplished as per Section C, subsection 3.2.5, of the basic contract.

3.5.2 The contractor shall complete a DD Form 1348-1 as turn-in documentation. Instructions for completing this form are contained in the Defense Utilization and Disposal Manual, DOD 4160.21-M. The Senior UXO Supervisor shall sign a certificate as follows:

"I certify that the property listed hereon has been inspected by me and, to the best of my knowledge and belief, contains no items of a dangerous or hazardous nature."

3.5.3 DRMO turn-in documentation receipts shall be submitted as a component of the Removal Report.

3.6 TASK 6: PERFORM QUALITY CONTROL.

3.6.1 The contractor shall administer a Quality Control (QC) program to manage, control, and document his own and his subcontractor's activities. The methodology to accomplish this task shall be proposed in the WP. The QC activities shall be docu-mented and included in the Removal Report.

3.6.2 The individual performing the UXO QC shall not be involved in the performance of Task 4 above. UXO QC shall be a separate function and is not envisioned as a full-time position. The UXO QC Specialist shall meet the minimum prerequisites as outlined in Section C, subsection 3.2.4.2.

3.7 TASK 7: PREPARE AND SUBMIT REMOVAL REPORT.

3.7.1 The contractor shall accomplish this task in accordance with Section C, subsection 3.2.7, of the basic contract.

3.7.2 The Final Removal Report shall consist of the following:

3.7.2.1 All original surveying and mapping data from Task 3.

3.7.2.2 Detailed accounting by listed area of all UXO and UXO-related materials located and disposed of.

3.7.2.3 A system of daily journals of all activities associated with this SOW.

3.7.2.3.1 A daily journal for each area listed in subsection 1.3 shall be opened with the start of and closed with the completion of each area. Activities endemic to the specific listed area shall be recorded on a daily basis.

3.7.2.3.2 A daily journal for the site shall be opened upon first arrival for filed operations and closed after contractor demobilization at the project site. It shall contain a daily record of which listed areas are active and of all other activi-ties on site not endemic to any specific area.

3.7.2.4 A recapitulation of exposure data. This shall include total number of man-hours worked on site, total motor vehicle mileage, total number of flying hours, and number of flights.

3.7.2.5 QC documentation.

3.7.2.6 All DRMO turn-in documentation.

3.7.2.7 A minimum of 20 4" x 6" (10 x 15cm) color photographs shall be included in the report depicting major action items and UXO discoveries. The original, Final Report furnished to CEHND shall include original photographic print. Photographs contained in draft submissions and copies of final submissions shall be color reproductions.

3.7.2.8 Public meeting written record.

3.7.2.9 A financial breakdown by area and task of all costs and labor hours used to perform this SOW.

3.7.2.10 Video tapes. This contractor will provide two copies of video tapes, one each for CEHND-PM-OT and Tooele Army Depot.

3.7.2.11 The contractor will provide a planimetric map (at a scale no smaller than 1 inch = 200 feet [1:2400]). Upon this map the contractor shall show location of search patterns and significant findings with respect to all surface features within the project area.

3.8 Personnel Qualifications and Job Descriptions. The contractor shall furnish a staff that is qualified through education, training, and pertinent experience that shall accomplish the objective and tasks of this SOW. See Section C, subsection 3.2.4.2 of the basic contract.

4.0 SUBMITTALS: The contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.1 to each addressee listed below in the quantities indicated. The contractor shall use express mail services for delivering these plans and reports. Following each submission, comments generated as a result of the review shall be incorporated.

ADDRESSEE	COPIES
US ARMY ENGINEER DIVISION, HUNTSVILLE ATTN: CEHND-PM-OT (Mr. Ray Leone) 106 WYNN DRIVE HUNTSVILLE, AL 35805-1957	5
US ARMY CORPS OF ENGINEERS Sacramento District ATTN: CESPK-MD-MM 1325 J Street Sacramento, CA 95814-2922	3
Commander Tooele Army Depot ATTN: Industrial Risk Management SDSTE-IRE (Mr. Larry Fisher) Tooele Army Depot, UT 84074	4
Commander 548th Ord Det (EODCT) Ft. Lewis, WA 98433	2

4.1 Submittals and Due Dates

SUBMITTAL	DUE DATES (calendar days after site visit)
Disposal Letter	3 days
Draft Work Plan	10 days
Final Work Plan	20 days
Draft Removal Report	30 days after completion of field work
Final Removal Report	20 days after receipt of comments

4.2 Status Report and Telephone/Conversation Report are due monthly. The original of each of these reports shall be faxed on each Monday to 205-955-5788 and mailed by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (Mr. Leone)
106 Wynn Drive
Huntsville, AL 35805-1957

5.0 **APPLICABLE REGULATIONS.** See Section C, subsection 3.2.4.4, of the basic contract.

5.1 The following publication also applies:

5.1.1 AR 385-40 with USACE Supplements, Accident Reporting and Records.

6.0 **GOVERNMENT FURNISHED.**

6.1 Pertinent UXO Technical publications as required. (CEHND)

6.2 Equipment - The contractor shall contact the Government Property Manager at telephone number 205-955-5656 to determine the availability of Government Furnished Property (GFE).

6.3 Demolition Materials.

6.4 Approved Demolition Material Storage facility.

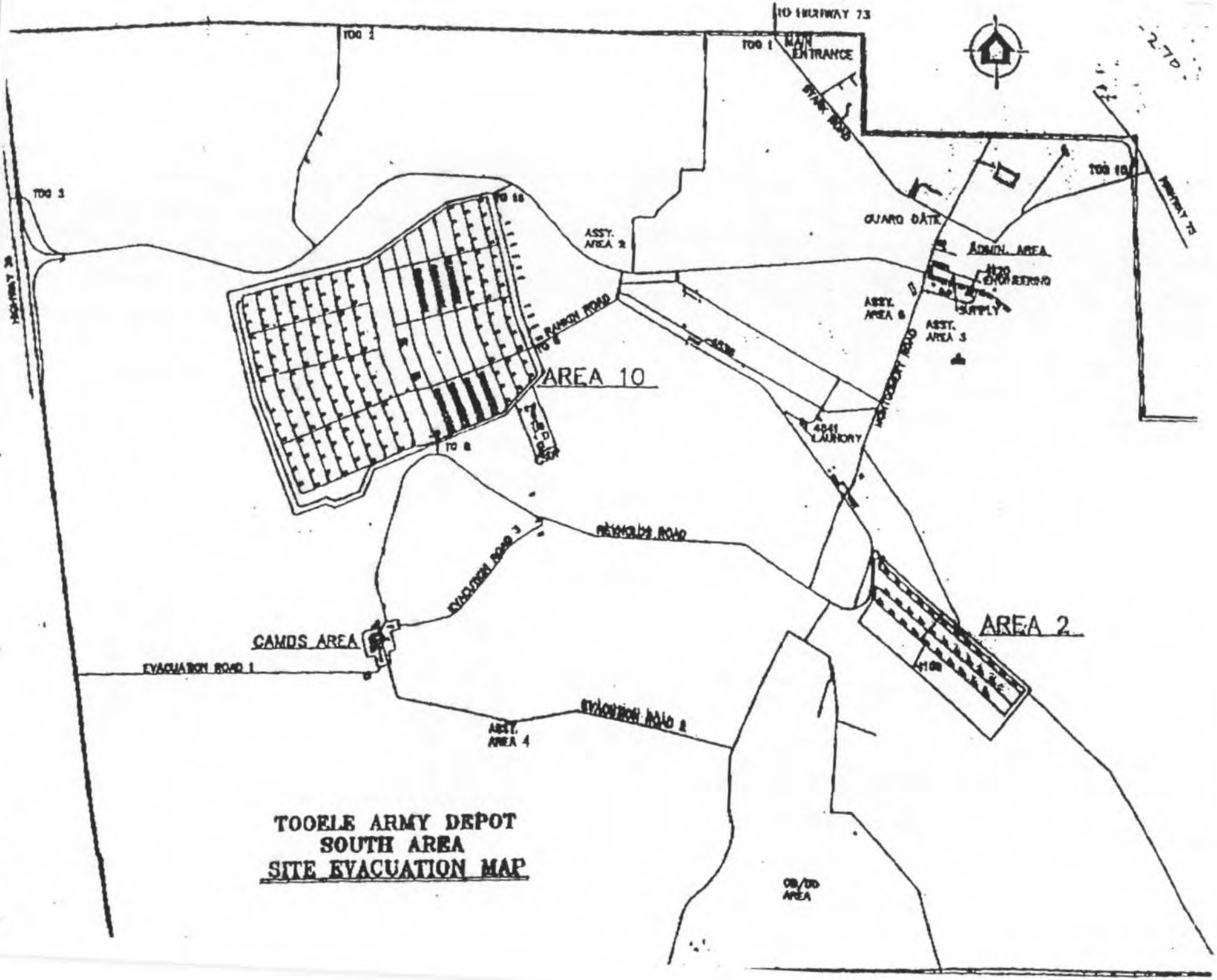
6.5 Rights of Entry.

6.6 EOD support as required per paragraph 3.4.6.

7.0 SPECIAL INSTRUCTIONS.

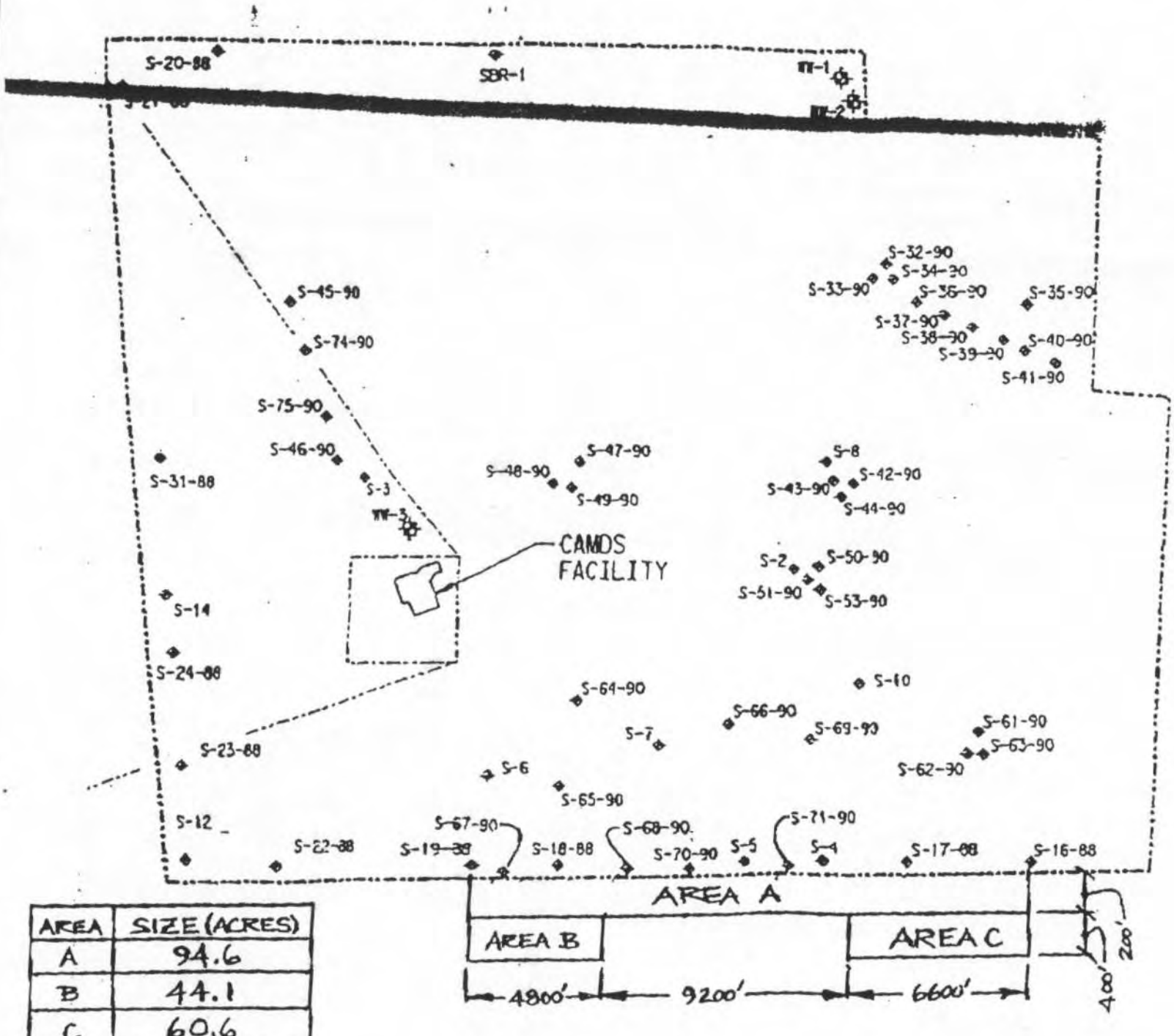
7.1 29 CFR 1926.100(a) requires personnel to wear protective helmets in areas where there is a possible danger of head injury from impact, from falling/flying objects, or from electrical shock and burns. During field activities on ordnance projects, hard hats need not be worn unless a head injury threat is present.

7.2 If a UXO is located within a grid during the final UXO QA search, the contractor will be required to, again, search the entire grid.



TOOELE ARMY DEPOT
SOUTH AREA
SITE EVACUATION MAP

Encl 1



AREA	SIZE (ACRES)
A	94.6
B	44.1
C	60.6

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGE 1 4

2. AMENDMENT/MODIFICATION NO. 001001

3. EFFECTIVE DATE 09/28/93

4. REQUISITION/PURCHASE REQ. NO. PM0042-2233-0262

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offe submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDG MENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP3673HY0180004 2132050 08-8130 P7000 2572 S01110

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

X B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification 01 to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of deobligating funds.

b. Materials is decreased in the amount of $3,351.75 from $61,536.00 to $58,184.25. Labor remains unchanged at $201,097.00. Travel and Per Diem remains unchanged at $113,975.00. The total value of the order is decreased in the amount of $3,351.75 from $376,608.00 to $373,256.25.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs

16B. UNITED STATES OF AMERICA BY

(Signature of Contracting Officer)

16C. DATE SIGNED 28 Sep

c. This adjustment constitutes compensation in full on behalf of the contractor and its subcontractors and suppliers for all costs and markups directly or indirectly attributable to the changes ordered herein, for all delays related thereto, and performance of changes within the contract performance time stated.

d. The Schedule is revised to reflect changes. Pages revised by this modification have asterisks in the margins before and after changes to previous issue.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF 4 PAGES

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
001002	11/10/93	PM0042-2[illegible]	

6. ISSUED BY CODE 8C13

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.C. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

9A. AMENDMENT OF SOLICITATION NO. (X)

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO. X DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP3673HY0180004 2132020 08-8130 P788008.11 2572 S01110 (-$53,982.01)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification 02 to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S) UT., is for the purpose of reducing labor hours and travel and per diem and reducing the number of acres to be cleared to a depth of 3 feet by 23 acres.

b. Labor is decreased in the amount of $34,480.01 from $201,097.00 to $166,616.99. Travel and per diem is decreased in the amount of $19,502.00 from $113,975.00 to $94,473.00. Materials remains unchanged in the amount

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
ELIZABETH H THEISEN		Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED 9 NOV 1993	16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED 9 Nov 9[illegible]

NSN 7540-01-152-8071
PREVIOUS EDITION UNUSABLE

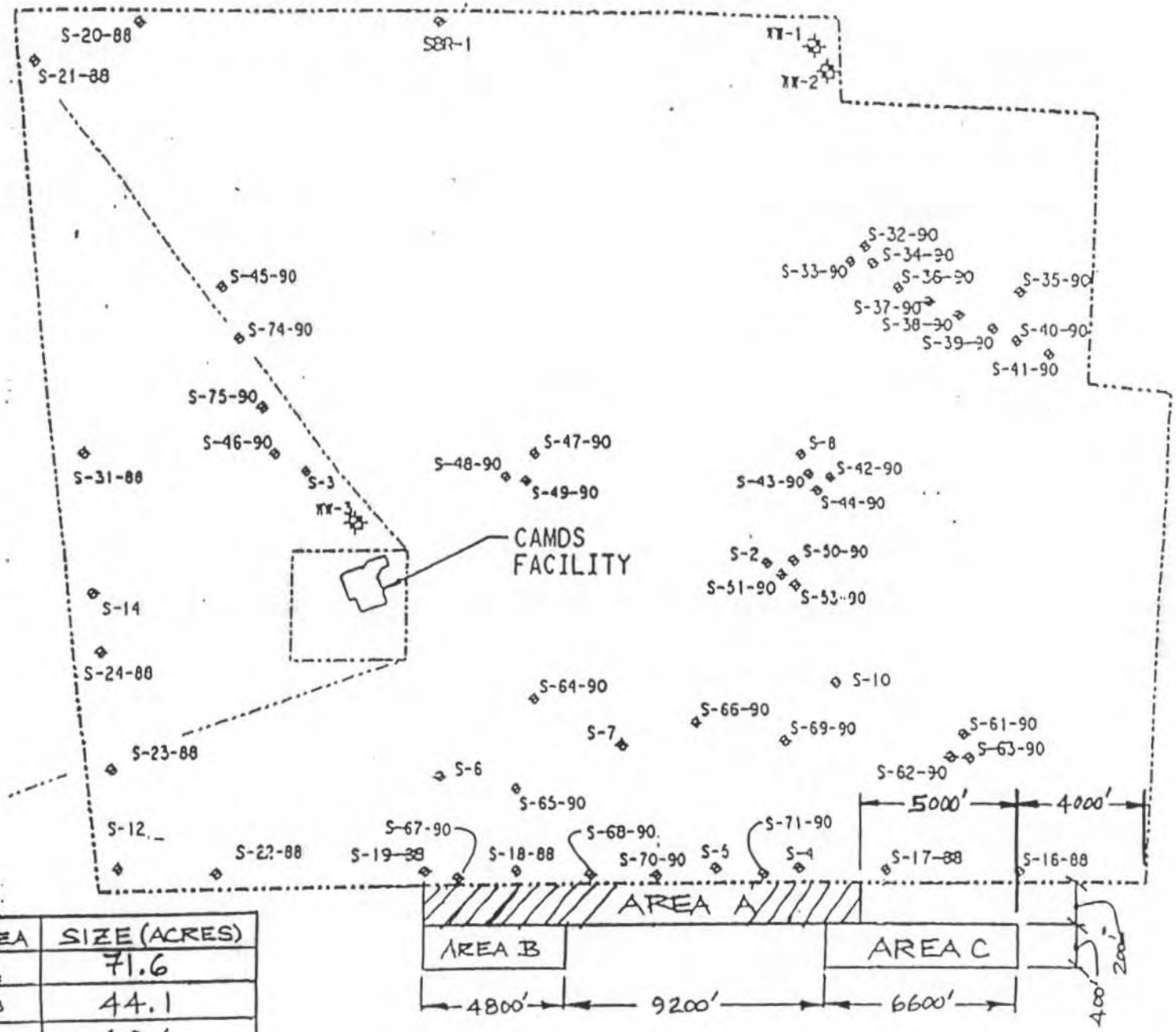
30-105

STANDARD FORM 30 (REV. 10-[illegible])
Prescribed by GSA
FAR (48 CFR) 53.243

of $58,184.25. The total value of the delivery order is decreased in the amount of $53,982.01 from $373,256.25 to $319,274.24.

c. The Schedule is revised to reflect changes. Pages revised by this modification have asterisks in the margins before and after changes to previous issue.

DACA87-92-D-0133 0010
Modification 02



AREA	SIZE (ACRES)
A	71.6
B	44.1
C	60.6

TOOELE A.D. - S. POST
REVISED 11/1/93

EXCL 2

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGE
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
001003	11/17/93	PM0042-2233-0262	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE, AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, Orders & I.79, FAR 52.243-0003, Changes

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of modifying the Scope of Work, realigning the cost schedule and providing direction regarding Phase I and Phase II of the work.

b. The Scope of Work contains changes in paragraphs 1.3.2.1, 1.3.2.2 and 3.4.1. Paragraph 1.3.2.3 has been deleted.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)
ELIZABETH H. THEISEN

15B. CONTRACTOR/OFFEROR
Elizabeth H. Theisen
(Signature of person authorized to sign)

15C. DATE SIGNED
17 NOV. 1993

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Danny Biggs

16B. UNITED STATES OF AMERICA
BY
(Signature of Contracting Officer)

16C. DATE SIGNED
17 Nov 93

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

c. Paragraph 3.4.1.1 states that after the Contracting Officer approves the Addendum Work Plan, the contractor shall proceed with Phase I of this modification. The contractor shall neither proceed with nor expend any monies associated with Phase II of this modification without the additional written approval of the Contracting Officer. The total value of the delivery order (through mod 02) is $319,274.24. The not-to-exceed amount for each phase is as follows:

	Phase I	Phase II	Total D.O. Amount
Labor	$68,495.60	$80,098.40	148,594.00
Materials	16,000.00	64,080.24	80,080.24
Travel and Per Diem	44,300.00	46,300.00	90,600.00
Not-to-Exceed amt	$128,795.60	$190,478.64	$319,274.24

The overall effect is labor is decreased in the amount of $18,022.99 from $166,616.99 to $148,594.00. Materials is increased in the amount of $21,895.99 from $58,184.25 to $80,080.24. Travel and Per Diem is decreased in the amount of $3,873.00 from $94,473.00 to $90,600.00. The total value of the order remains $319,274.24.

d. The Schedule and Scope of Work are revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

SCOPE OF WORK
UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION
TOOELE ARMY DEPOT SOUTH AREA (TEAD-S), UTAH

10 AUGUST 1993

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration (IR). Ordnance and Explosive Waste (OEW) contamination exists on private property as a result of Department of Defense (DOD) activities.

1.1 OEW is a safety hazard and constitutes an imminent and substantial endangerment to the local populace and site personnel. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 104 and the National Contingency Plan, Sections 300.120(c) and 300.400(e). In accordance with the above, no Federal, State, or Local permits are required nor will be obtained for on-site disposal of OEW.

1.1.1 This action does not fall under the provisions of 29 CFR 1910.120.

1.1.2 This project does not require an on site, full-time contractor project manager as identified in Section C, subsection 3.1.1 of the basic contract.

1.2 Due to the inherent risk in this type of operation, the contractor shall be limited to a 40-hour work week: either five 8-hour days or four 10-hour days. UXO personnel shall not perform UXO-related tasks more than 10 hours a day.

1.3 GENERAL DESCRIPTION.

1.3.1 Tooele Army Depot is located in northwest Utah approximately 50 miles west southwest of Salt Lake City, UT. The installation contains approximately 25,000 acres. TEAD-S was established in 1942 and has been one of the major chemical ammunition storage centers for the U.S. Army during the ensuing years. The current mission of TEAD-S is to receive, store, and dispose of chemical munitions.

1.3.2 This SOW pertains to the following areas to be cleared of OEW and scrap located outside and adjacent to the southern installation boundary of TEAD-S (see encl 1).

* 1.3.2.1 Area A. Area A, which is 300 feet wide, extends 14,250 feet along the southern border of the installation. (See Encl 2). Phase I of this project will include surface clearance only of Area A. *

* 1.3.2.2 Area B. Area B, which is 200 feet wide, extends 13,000 feet along the southern boundary of Area A. (See Encl 2). Phase II of this project will include surface and subsurface clearance of Area B. *

* 1.3.2.3 DELETED. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1.

3.1.1 Site Visit. The site visit will be accomplished by no more than two contractor representatives from the TEAD-N project site, one of which will be a Senior UXO Supervisor, and shall not exceed 2 working days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, Defense Reutilization and Marketing Office (DRMO), Directorate of Industrial Risk Manage- ment (DIRM), Directorate of Chemical Munitions and Ammunition Operations, and Medical Facility. Coordination shall also be made with the Federal Aviation Administration (FAA) to ensure local air clearance. No UXO related activities will be performed during the site visit. The contractor shall coordinate with the TEAD-N Security Office (801-833-2713) prior to the site visit. The

adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 TASK 4: PERFORM OEW REMOVAL. This task shall be accomplished in accordance with Section C, subsection 3.2.4 of the basic contract.

* 3.4.1 The contractor shall provide all necessary personnel and equipment to surface clear Area A, surface/subsurface clear Area B, and dispose of all OEW on site. This clearance action shall include all UXO-related scrap and non UXO-related scrap. *

* 3.4.1.1. Upon CO approval of the Addendum Work Plan, the contractor shall proceed with Phase I of this modification. However, the contractor shall neither proceed with nor expend any monies associated with Phase II of this modification without the additional, written approval of the CO. *

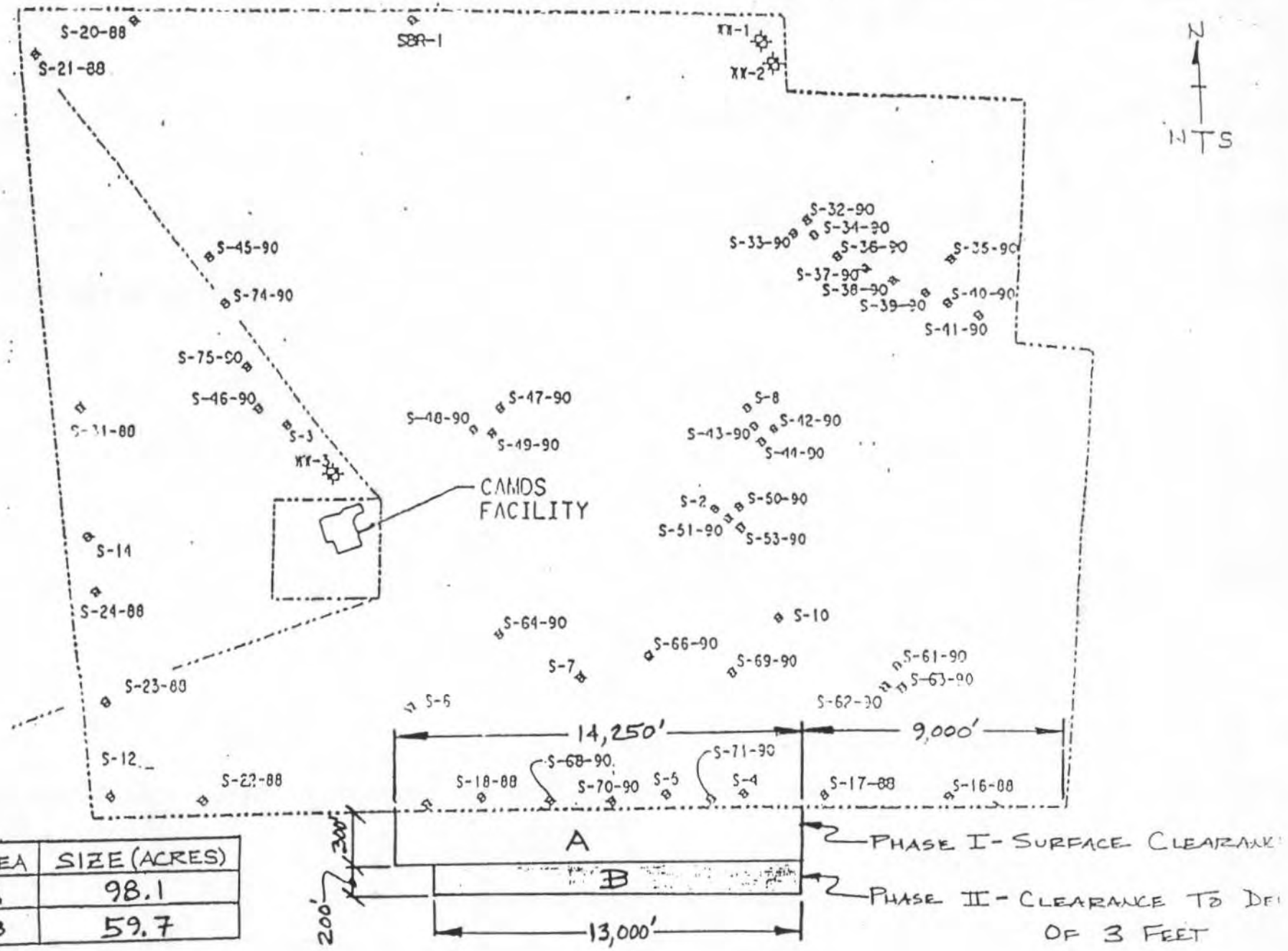
3.4.2 The contractor shall propose a planned, systematic approach to search and clear the project site that will result in optimum search effectiveness. This methodology shall be outlined in the WP.

3.4.3 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 75mm projectile at a depth of 3 feet. The contractor shall excavate to a depth of 3 feet to determine the identity of the magnetic anomaly. If deeper excavation is required, the on-site CEHND Safety Specialist will make that decision.

3.4.3.1 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a similar magnetic inert item to a depth of 3 feet and determining the standard indication. If a magnetometer does not meet the standard during the daily check, it shall be calibrated/repaired.

3.4.3.2 All access/excavation/detonation holes shall be backfilled. The contractor shall seed the backfilled areas with native vegetation or vegetation approved by TEAD-N and the CO.

3.4.4 The contractor shall maintain a detailed accounting of all OEW items/components encountered. This accounting shall include the amounts of OEW, the identification and condition, depth located, disposition and location/mapping. This accounting shall be a part of the Removal Report.



AREA	SIZE (ACRES)
A	98.1
B	59.7

TOOELE A.D. - S. POST

DACA87-92-D-0133 0010 Mod 03

ENCL 2
REVISED 6 NOV 93

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGES 1 4

2. AMENDMENT/MODIFICATION NO. 001004

3. EFFECTIVE DATE 94/04/18

4. REQUISITION/PURCHASE REQ. NO. PM0042-2233-0262

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X

10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP3673HY0180004 2132020 08-8130 P788008.11 2572 S01110

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of providing a new Scope of Work, and decreasing the number of hours ordered, materials, travel and per diem.

b. Labor is decreased in the amount of $50,366.56 from $148,594.00 to $98,227.44. Materials is decreased in the amount of $6,895.47 from $80,080.24 to $73,184.77. Travel and Per Diem is decreased in the amount of

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs

16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)

16C. DATE SIGNED 18 Apr 94

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

$18,774.84 from $90,600.00 to $71,825.16. The total value of the order is decreased in the amount of $76,036.87 from $319,274.24 to $243,237.37. The not-to-exceed amount for each phase as provided in paragraph "c" of modification 001003 is deleted.

c. The Scope of Work dated 4 March 1994 replaces previous version. The Schedule is revised to reflect changes. Asterisks appear in the margins before and after changes to previous issue.

SCOPE OF WORK
UNEXPLODED ORDNANCE (UXO) REMOVAL ACTION
TOOELE ARMY DEPOT SOUTH AREA (TEAD-S), UTAH

4 MARCH 1994

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration (IR). Ordnance and Explosive Waste (OEW) contamination exists on private property as a result of Department of Defense (DOD) activities.

1.1 OEW is a safety hazard and constitutes an imminent and substantial endangerment to the local populace and site personnel. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act(CERCLA), Section 104 and the National Contingency Plan, Sections 300.120(c) and 300.400(e). In accordance with the above, no Federal, State, or Local permits are required nor will be obtained for on-site disposal of OEW.

1.1.1 OEW is not classified as hazardous waste, thus, this action does not fall under the provisions of 29 CFR 1910.120.

1.1.2 This project does not require an on site, full-time contractor project manager as identified in Section C, subsection 3.1.1 of the basic contract.

1.2 Due to the inherent risk in this type of operation, the contractor shall be limited to a 40-hour work week: either five 8-hour days or four 10-hour days. UXO personnel shall not perform UXO-related tasks more than 10 hours a day.

1.3 GENERAL DESCRIPTION.

1.3.1 Tooele Army Depot is located in northwest Utah approximately 50 miles west southwest of Salt Lake City, UT. The installation contains approximately 25,000 acres. TEAD-S was established in 1942 and has been one of the major chemical ammunition storage centers for the U.S. Army during the ensuing years. The current mission of TEAD-S is to receive, store, and dispose of chemical munitions.

1.3.2 This SOW pertains to the following areas to be cleared of OEW and scrap located outside and adjacent to the southern installation boundary of TEAD-S (see encl 1).

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Delivery Order 010 Mod 04

1.3.2.1 Area A, Phase I. Area A, which is 200 feet wide, extends 8,300 feet along the southern border of the installation (see Encl 1). This area will be surface cleared.

1.3.2.2 Area B, Phase II. Area B, which is 200 feet wide, extends 8,000 feet along the southern border of Area A mentioned above (see Encl 1). This area will be cleared to a depth of 3 feet. Work in Area B will commence only after the Contractor receives Safety Specialist or Project Manager approval. The Safety Specialist, with the concurrence of the Project Manager, may require that portions of Area A, in lieu of Area B, be cleared to a depth of 3 feet after reviewing results of the Area A surface clearance.

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor,

and shall not extend longer than 5 workng days. The site visit shall include liaison visits and coordination with the following offices at TEAD-N: Provost Marshal, Defense Reutilization and Marketing Office (DRMO), Directorate of Industrial Risk Management (DIRM), Directorate of Chemical Munitions and Ammunition Operations, and Medical Facility. Coordination shall also be made with the Federal Aviation Administration (FAA) to ensure local air clearance. No UXO related activities will be performed during the site visit. The contractor shall coordinate with the TEAD-N Security Office (801-833-2713) prior to the site visit. The schedule for the site visit shall be coordinated with the USAEDH Project Manager (Mr. Ray Leone, (205-955-1243)) at least 10 days in advance.

3.1.2 Disposal Alternatives. Based on the site visit, the contractor shall describe feasible alternatives for disposal and recommend the safest and most cost effective method of treatment and disposal of the explosive ordnance, inert ordnance, explosive, and debris. This letter proposal shall be forwarded to the contracting officer (CO). The method of treatment will be selected and approved by the CO after which the contractor will then proceed with preparation of the WP.

3.1.3 Work Plan (WP). The contractor shall prepare and submit a site-specific WP to the Government for approval prior to beginning any UXO-related activities on the site. The WP shall outline the contractor's proposed methodology for accomplishing the objective and following tasks. This shall include site-specific training, UXO-related procedures and practices, equipment, administrative area and equipment, demolition materials and their security and accountability system, personal protective equipment, internal and external communications systems, responsibilities of project personnel, resumes of all UXO personnel and key non UXO personnel, on-site and off-site medical facilities and emergency response actions to include transportation, and the completion of ENG Form 3394 in the event of an accident, daily work schedule, project time line, UXO safety and site general safety. All UXO-related procedures shall comply with *CEHND Safety Concepts and Basic Considerations* for UXO. The WP shall include, as a minimum, the following subplans. See Section C, subsection 3.2.1 of the basic contract for detailed requirements.

3.1.3.1 UXO Operational Plan.

3.1.3.2 Accident Prevention Plan (See Section J, Attachment 4 of basic contract.).

3.1.3.3 Equipment Plan.

3.1.3.4 Surveying and Mapping Plan.

3.1.3.5 Environmental Protection Plan (See Section C, subsection 5.0 of the basic contract.).

3.1.3.6 Quality Control Plan.

3.1.3.7 Work, Data, and Cost Management Plan.

3.1.3.8 Other subplans identified in Section C, subsection 3.2.1 of the basic contract are not required for this delivery order.

3.1.4 Contractor shall notify the PM at least 10 days prior to mobilization.

3.2 TASK 2: PERFORM COMMUNITY RELATIONS. This task shall be accomplished in accordance Section C, subsection 3.2.3, of the basic contract.

3.2.1 The contractor shall assist, if requested, in arranging a local public meeting to inform the public of the purpose of this clearance, the procedures to be followed, and the cooperation requested.

3.2.2 All press releases and media appearances shall be coordinated with and approved by the Public Affairs Officer (PAO), TEAD-N.

3.2.3 A written record of the public meeting attendees, questions, and answers shall be provided as part of the final report.

3.2.4 Public Affairs. The contractor shall not make available or publicly disclose any data generated or reviewed under this contract or any subcontract unless specifically authorized by the CO and the TEAD-N PAO. When approached by any person or entity requesting information about the subject of this contract, the contractor shall defer to PAO for response. Reports and data generated under this contract shall become the property of the Government and distribution to any other source by the contractor is prohibited unless authorized by the CO.

3.3 TASK 3: PERFORM LOCATION SURVEYS AND MAPPING.

3.3.1 All surveying or mapping crews shall be escorted by an UXO Supervisor. A magnetometer shall be used to survey the location for the establishment of any monuments or markers.

3.3.2 As needed, the contractor shall survey and establish the boundaries of areas stated under subsection 1.3 of this SOW. The contractor shall mark the corners and outer edges of the designated areas with stakes or other visible temporary markers.

3.3.3 Items and data to be submitted to CEHND as part of this task are as follows:

3.3.3.1 A tabulated list of all control points showing the adjusted coordinates established and/or used for this survey.

3.3.3.2 A "Report of Establishment of Survey Mark" (Description Card) on each control point established and/or used for surveying. The Description Cards shall be 5" X 8" (12.7mm X 20.3mm) with one description per card. In addition to the name or ID number of the control points, the cards should show the adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall be delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 TASK 4: PERFORM OEW REMOVAL. This task shall be accomplished in accordance with Section C, subsection 3.2.4 of the basic contract.

3.4.1 The contractor shall provide all necessary personnel and equipment to perform surface OEW clearance of Area A and surface/subsurface clearance of Area B, and dispose of all OEW on site. This clearance action shall include all UXO-related scrap and non UXO-related metallic scrap.

3.4.2 The contractor shall propose a planned, systematic approach to search and clear the project site that will result in optimum search effectiveness. This methodology shall be outlined in the WP.

3.4.3 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 75mm projectile at a depth of 3 feet. The contractor shall excavate to a depth of 3 feet to determine the identity of the magnetic anomaly. If deeper excavation is required, the on-site CEHND Safety Specialist will make that decision.

3.4.3.1 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a similar magnetic inert item to a depth of 3 feet and determining the standard indication. If a magnetometer does not meet the standard during the daily check, it shall be calibrated/repaired.

3.4.3.2 All access/excavation/detonation holes shall be back-filled. The contractor shall seed the backfilled areas with native vegetation or vegetation approved by TEAD and the CO.

3.4.4 The contractor shall maintain a detailed accounting of all OEW items/components encountered. This accounting shall include the amounts of OEW, the identification and condition, depth located, disposition and location/mapping. This accounting shall be a part of the Removal Report.

3.4.4.1 The accounting system shall also account for all demolition materials utilized to detonate OEW on site.

3.4.4.2 The contractor shall comply with all TEAD regulations with regards to the issue, movement, and turn in of demolition materials.

3.4.5 The contractor shall have a contingency plan in place to provide demolition materials in the event the Government supply is depleted and/or resupply is not timely. This shall be outlined in the WP.

3.4.6 If a situation is encountered that precludes the contractor from detonating an UXO in place, the on-site CEHND Safety Specialist will request EOD Support.

3.4.7 Activities of this task shall be video-taped in color using "Hi-grade" VHS video tape. A total of 45 to 60 minutes of footage, with an oral background describing the activities, shall be submitted on a single tape cassette.

3.5 TASK 5: TURN IN OF RECOVERED OEW-RELATED AND NON OEW-RELATED SCRAP.

3.5.1 This task shall be accomplished as per Section C, subsection 3.2.5, of the basic contract.

3.5.2 The contractor shall complete a DD Form 1348-1 as turn-in documentation. Instructions for completing this form are contained in the Defense Utilization and Disposal Manual, DOD 4160.21-M. The Senior UXO Supervisor shall sign a certificate as follows:

"I certify that the property listed hereon has been inspected by me and, to the best of my knowledge and belief, contains no items of a dangerous nature."

3.5.3 DRMO turn-in documentation receipts shall be submitted as a component of the Removal Report.

3.6 TASK 6: PERFORM QUALITY CONTROL.

3.6.1 The contractor shall administer a Quality Control (QC) program to manage, control, and document his own and his subcontractor's activities. The methodology to accomplish this task shall be proposed in the WP. The QC activities shall be documented and included in the Removal Report.

3.6.2 The individual performing the UXO QC shall not be involved in the performance of Task 4 above. UXO QC shall be a separate function and is not envisioned as a full-time position. The UXO QC Specialist shall meet the minimum prerequisites as outlined in Section C, subsection 3.2.4.2.

3.7 TASK 7: PREPARE AND SUBMIT REMOVAL REPORT.

3.7.1 The contractor shall accomplish this task in accordance with Section C, subsection 3.2.7, of the basic contract.

3.7.2 The Final Removal Report shall consist of the following:

3.7.2.1 All original surveying and mapping data from Task 3.

3.7.2.2 Detailed accounting by listed area of all UXO and UXO-related materials located and disposed of.

3.7.2.3 A system of daily journals of all activities associated with this SOW.

3.7.2.3.1 A daily journal for each area listed in subsection 1.3 shall be opened with the start of and closed with the completion of each area. Activities endemic to the specific listed area shall be recorded on a daily basis.

3.7.2.3.2 A daily journal for the site shall be opened upon first arrival for filed operations and closed after contractor demobilization at the project site. It shall contain a daily record of which listed areas are active and of all other activities on site not endemic to any specific area.

3.7.2.4 A recapitulation of exposure data. This shall include total number of man-hours worked on site, total motor vehicle mileage, total number of flying hours, and number of flights.

3.7.2.5 QC documentation.

3.7.2.6 All DRMO turn-in documentation.

3.7.2.7 A minimum of 20 4" x 6" (10 x 15cm) color photographs shall be included in the report depicting major action items and UXO discoveries. The original, Final Report furnished to CEHND shall include original photographic print. Photographs contained in draft submissions and copies of final submissions shall be color reproductions.

3.7.2.8 Public meeting written record.

3.7.2.9 A financial breakdown by area and task of all costs and labor hours used to perform this SOW.

3.7.2.10 Video tapes. This contractor will provide two copies of video tapes, one each for CEHND-PM-OT and Tooele Army Depot.

3.7.2.11 The contractor will provide a planimetric map (at a scale no smaller than 1 inch = 200 feet [1:2400]). Upon this map the contractor shall show location of search patterns and significant findings with respect to all surface features within the project area.

3.8 Personnel Qualifications and Job Descriptions. The contractor shall furnish a staff that is qualified through education, training, and pertinent experience that shall accomplish the objective and tasks of this SOW. See Section C, subsection 3.2.4.2 of the basic contract.

4.0 SUBMITTALS: The contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.1 to each addressee listed below in the quantities indicated. The contractor shall use express mail services for delivering these plans and reports. Following each submission, comments generated as a result of the review shall be incorporated.

ADDRESSEE	COPIES
US ARMY ENGINEER DIVISION, HUNTSVILLE ATTN: CEHND-PM-OT (Mr. Ray Leone) 106 WYNN DRIVE HUNTSVILLE, AL 35805-1957	5
US ARMY CORPS OF ENGINEERS Sacramento District ATTN: CESPK-MD-MM 1325 J Street Sacramento, CA 95814-2922	2
Commander Tooele Army Depot ATTN: Industrial Risk Management SDSTE-IRE (Mr. Larry Fisher) Tooele Army Depot, UT 84074	4
Commander 548th Ord Det (EODCT) Ft. Lewis, WA 98433	1

4.1 Submittals and Due Dates

SUBMITTAL	DUE DATES (calendar days after award)
Disposal Letter	20 days
Draft Work Plan	45 days
Final Work Plan	65 days
Draft Addendum to Work Plan	10 days after receipt of Modification 04
Final Addendum to Work Plan	20 days after receipt of Modification 04

Draft Removal Report	30 days after completion of field work
Final Removal Report	20 days after receipt of comments

4.2 Status Report and Telephone/Conversation Report are due monthly. The original of each of these reports shall be sent within 10 working days of the end of the reporting period by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (Mr. Leone)
106 Wynn Drive
Huntsville, AL 35805-1957

5.0 APPLICABLE REGULATIONS. See Section C, subsection 3.2.4.4, of the basic contract.

5.1 The following publication also applies:

5.1.1 AR 385-40 with USACE Supplements, Accident Reporting and Records.

6.0 GOVERNMENT FURNISHED.

6.1 Pertinent UXO Technical publications as required. (CEHND)

6.2 Equipment - The contractor shall contact the Government Property Manager at telephone number 205-955-5656 to determine the availability of Government Furnished Property (GFE).

6.3 Demolition Materials.

6.4 Approved Demolition Material Storage facility.

6.5 Rights of Entry.

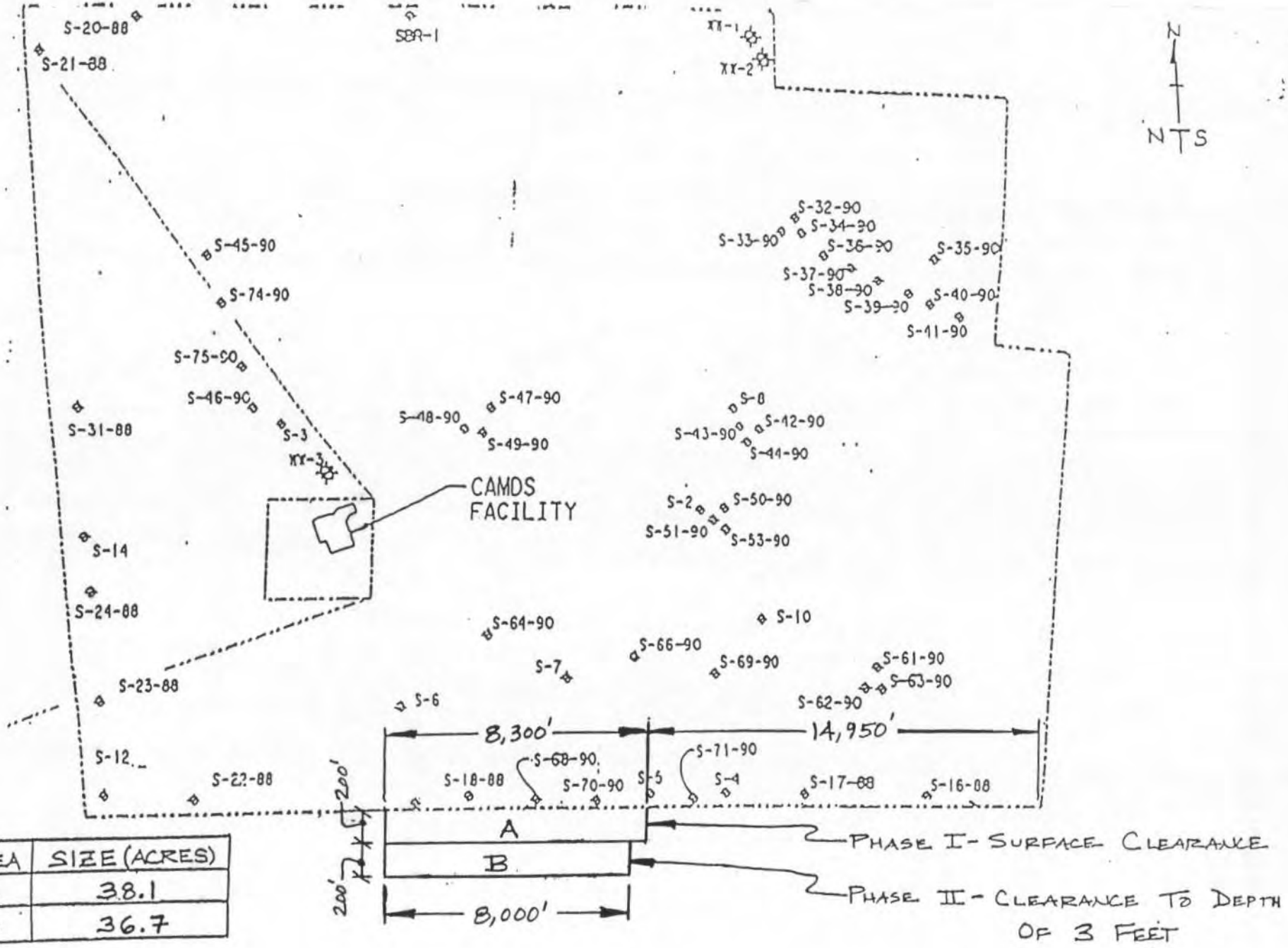
6.6 EOD support as required per paragraph 3.4.6.

7.0 SPECIAL INSTRUCTIONS.

7.1 29 CFR 1926.100(a) requires personnel to wear protective helmets in areas where there is a possible danger of head injury from impact, from falling/flying objects, or from electrical shock and burns. During field activities on ordnance projects,

hard hats need not be worn unless a head injury threat is present.

7.2 If a UXO is located within a grid during the final UXO QA search, the contractor will be required to, again, search the entire grid.



AREA	SIZE (ACRES)
A	38.1
B	36.7

FIG. 1
REVISED 4 MAR 94

TOOELE A.D. - S. POST

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
001005	05/25/94	PM0042-2233-0262	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of realigning cost and making a change in the scope of work.

b. Labor is decreased in the amount of $5,093.94 from $98,227.44 to $93,133.50. Materials is increased in the amount of $5,093.94 from $73,184.77 to $78,278.71. Travel and Per Diem remains unchanged in the amount of $71,825.16. The total value of the order remains unchanged in the

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Briggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 26 May 94

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

amount of $243,237.37.

c. The Schedule is revised to reflect changes. Page 2, paragraph 1.3.2.2 of the Scope of Work has been revised and paragraph 1.3.2.3 is added to include additional areas. Asterisks appear in the margins before and after changes to previous issue.

1.3.2.1 Area A, Phase I. Area A, which is 200 feet wide, extends 8,300 feet along the southern border of the installation (see Encl 1). This area will be surface cleared.

1.3.2.2 Area B, Phase II. Area B, which is 200 feet wide, extends 8,000 feet along the southern border of Area A mentioned above (see Encl 1). This area shall be surface cleared. *

* 1.3.2.3 Areas C and D, Phase II. Area C, 6500 feet by 200 feet and Area D, approximately 1300 feet by 600 feet are located south and east of area B respectively (see Encl 1). These areas shall be surface cleared. *

1.3.3 Clearing these areas will be a relatively normal UXO clearance operation, entailing close supervision of the clearance crew. The areas have sparse vegetation and a minimal amount of vegetation removal will need to be accomplished. Gently rolling hills are located in the areas and should present no problems for this clean-up operation. This area has never been cleared, and the contractor can expect to encounter all types of UXO.

1.3.4 The area within the southern boundary fence consists of an Open Burn/Open Detonation (OB/OD) area. The OB/OD area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

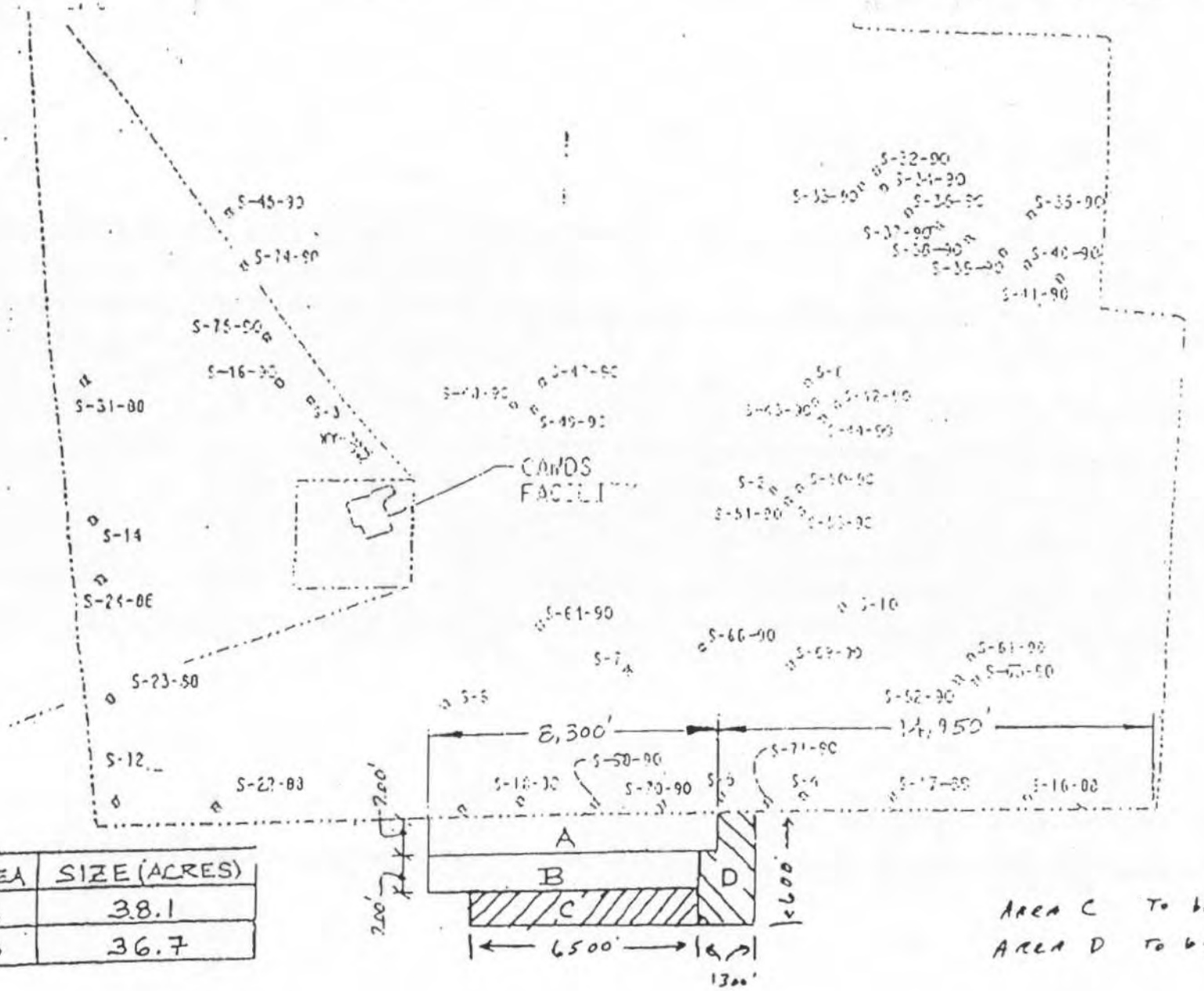
3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor,

DACA87-92-D-0133
Delivery Order 010 Mod 0 5

NTS



AREA	SIZE (ACRES)
A	38.1
B	36.7

AREA C To be added
AREA D To be added

TOOELE A.D. - S. POST

W N/S E

FIG. 1
REVISED 4 MAR 94

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAG
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
001006	06/14/94	PM0042-2233-0262	

6. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV.,HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than Item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS,INC

1966 BROOKE DRIVE
NEW HOPE PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offe submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDG MENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

n/a

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of revising page 2 of the Scope of Work and Figure 1 sketch. Labor, materials and travel have been realigned.

b. Labor is increased in the amount of $29,470.22 from $93,133.50 to $122,603.72. Materials are decreased in the amount of $40,403.04 from $78,278.71 to $37,875.67. Travel and Per Diem is increased in the amount

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGN 14 Jun 9

of $10,932.82 from $71,825.16 to $82,757.98. The total value of the order remains unchanged in the amount of $243,237.37.

c. The Schedule is revised to reflect changes. Page 2 of the Scope of Work contains changes. A revised Figure 1 Sketch dated 9 Jun 94 is provided. Asterisks appear in the margins before and after changes to previous issue.

* 1.3.2.1 Areas A, B, C, D, and E. See Figure 1. Each of these areas, with dimensions listed below, shall be surface cleared.

1.3.2.1.1 Area A. 8,300 feet long by 200 feet wide.

1.3.2.1.2 Area B. 8,000 feet long by 200 feet wide.

1.3.2.1.3 Area C. 6,500 feet long by 200 feet wide.

1.3.2.1.4 Area D. 1,300 feet long by 600 feet wide.

1.3.2.1.5 Area E. 6,000 feet long by 400 feet wide.

1.3.3 Clearing these areas, which are covered by sparse vegetation and involve gently rolling hills, will be a relatively normal UXO clearance operation, entailing close supervision of the clearance teams. *

1.3.4 The area within the the southern boundary fence consists of an Open Burning/Open Detonation (OB/OD) Area. The OB/OD Area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

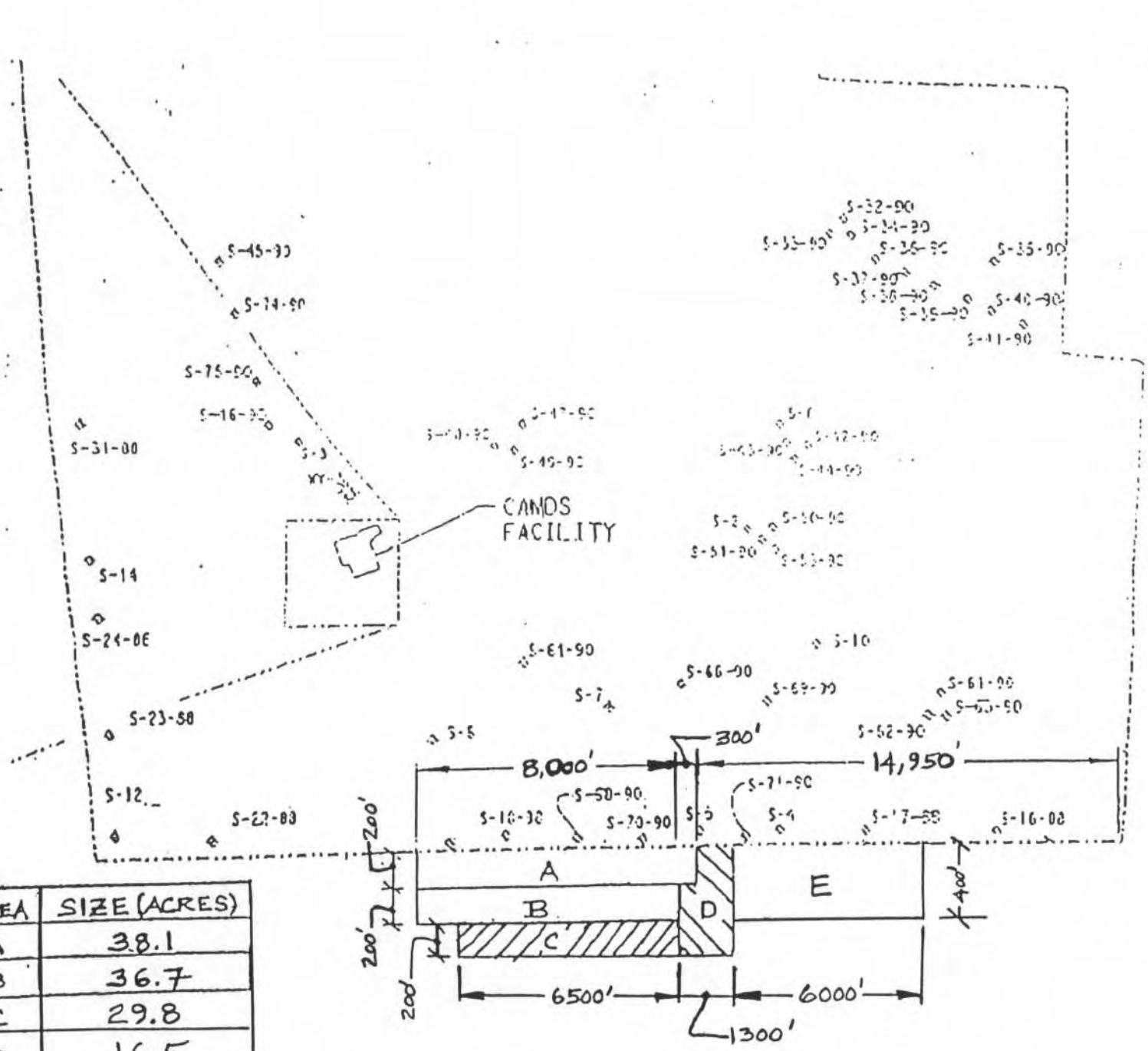
2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished
* in accordance with Section C, subsection 3.2.1 of the basic contract. *

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor,

DACA87-92-D-0133
Delivery Order 010 Mod



AREA	SIZE (ACRES)
A	38.1
B	36.7
C	29.8
D	16.5
E	55.1

TOOELE A.D. - S. POST

FIG. 1
REVISED 9 JUNE 94

*

Post-It™ brand fax transmittal memo 7671 | # of pages ▸

To Charlene G. Harrison	From Elizabeth H. Dherson
Co.	Co.
Dept CEHND-CT-D	Phone # (215) 794-3535
Fax # (205) 955-1358	Fax # 794-7353

AMENDMENT OF SOLICITATION/MODIFICATION OF CONT

2. AMENDMENT/MODIFICATION NO. 001007

3. EFFECTIVE DATE 06/23/94

4. ISSUED BY CODE 8013

U.S. ARMY ENG. DIV., HUNTSVILLE
ATTN: CEHND-CT-D/MARY STRINGER
P.O. BOX 1600
HUNTSVILLE AL 35807-4301
Mary F. Stringer C14 (205)955-5633

7. ADMINISTERED BY (If other than item 6) CODE EMPTY

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Vendor ID: 00011023

HUMAN FACTORS APPLICATIONS, INC

4950 RTE 202, BLDG 1, STE 2A
HOLICONG PA 18938-

CODE 7W639 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACA87-92-D-0133 0010

10B. DATED (SEE ITEM 13) 09/07/93

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified

12. ACCOUNTING AND APPROPRIATION DATA (If required)

RP367NY0180004 2132020 08-8130 P788008.11 2572 S01110 (-$88,304.80)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER (Specify type of modification and authority)
H.11, 52.242-4638, Orders
Changes, 52.243-0001

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

a. This modification to delivery order 0010, UXO Removal Action, Tooele Army Depot, South Area (TEAD-S), UT., is for the purpose of revising page 2 of the Scope of Work and Figure 1 Sketch. Labor, materials and travel have been realigned. This is a consequence of deleting Area E from the Scope of Work.

b. Labor is decreased in the amount of $38,950.79 from $122,603.72 to $83,652.93. Materials is decreased in the amount of $5,618.67 from $37,875.67 to $32,257.00. Travel and Per Diem is decreased in the amount of

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) ELIZABETH H. THEISEN, President

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Danny Biggs

15B. CONTRACTOR/OFFEROR Elizabeth H. Dherson (Signature of person authorized to sign)

15C. DATE SIGNED 28 June 1994

16B. UNITED STATES OF AMERICA BY Danny Biggs (Signature of Contracting Officer)

16C. DATE SIGNED 29 Jun 94

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-105

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

$43,735.34 from $82,757.98 to $39,022.64. The total value of the order is decreased in the amount of $88,304.80 from $243,237.37 to $154,932.57.

c. The Schedule is revised to reflect changes. Page 2 of the Scope of Work contains changes and a revised Figure 1 Sketch dated 20 Jun 94 is provided. Asterisks appear in the margins before and after changes to previous issue.

* 1.3.2.1 Areas A, B, C, and D. See Figure 1. Each of these areas, with dimensions listed below, shall be surface cleared. *

1.3.2.1.1 Area A. 8,300 feet long by 200 feet wide.

1.3.2.1.2 Area B. 8,000 feet long by 200 feet wide.

1.3.2.1.3 Area C. 6,500 feet long by 200 feet wide.

1.3.2.1.4 Area D. 1,300 feet long by 600 feet wide.

* ~~1.3.2.1.5 Area E. 6,000 foot long by 400 feet wide.~~ Deleted *

1.3.3 Clearing these areas, which are covered by sparse vegetation and involve gently rolling hills, will be a relatively normal UXO clearance operation, entailing close supervision of the clearance teams.

1.3.4 The area within the the southern boundary fence consists of an Open Burning/Open Detonation (OB/OD) Area. The OB/OD Area has been used since the 1940s for various demilitarization activities, including the destruction of munitions and propellant burning. These activities occurred at sites within the installation boundaries.

1.3.5 A Site Survey was conducted by members of the Corps of Engineers, Huntsville Division. The site was found to be contaminated with OEW and non OEW-related scrap.

1.4 DEFINITIONS. See Section C, subsection 2.3 of the basic contract.

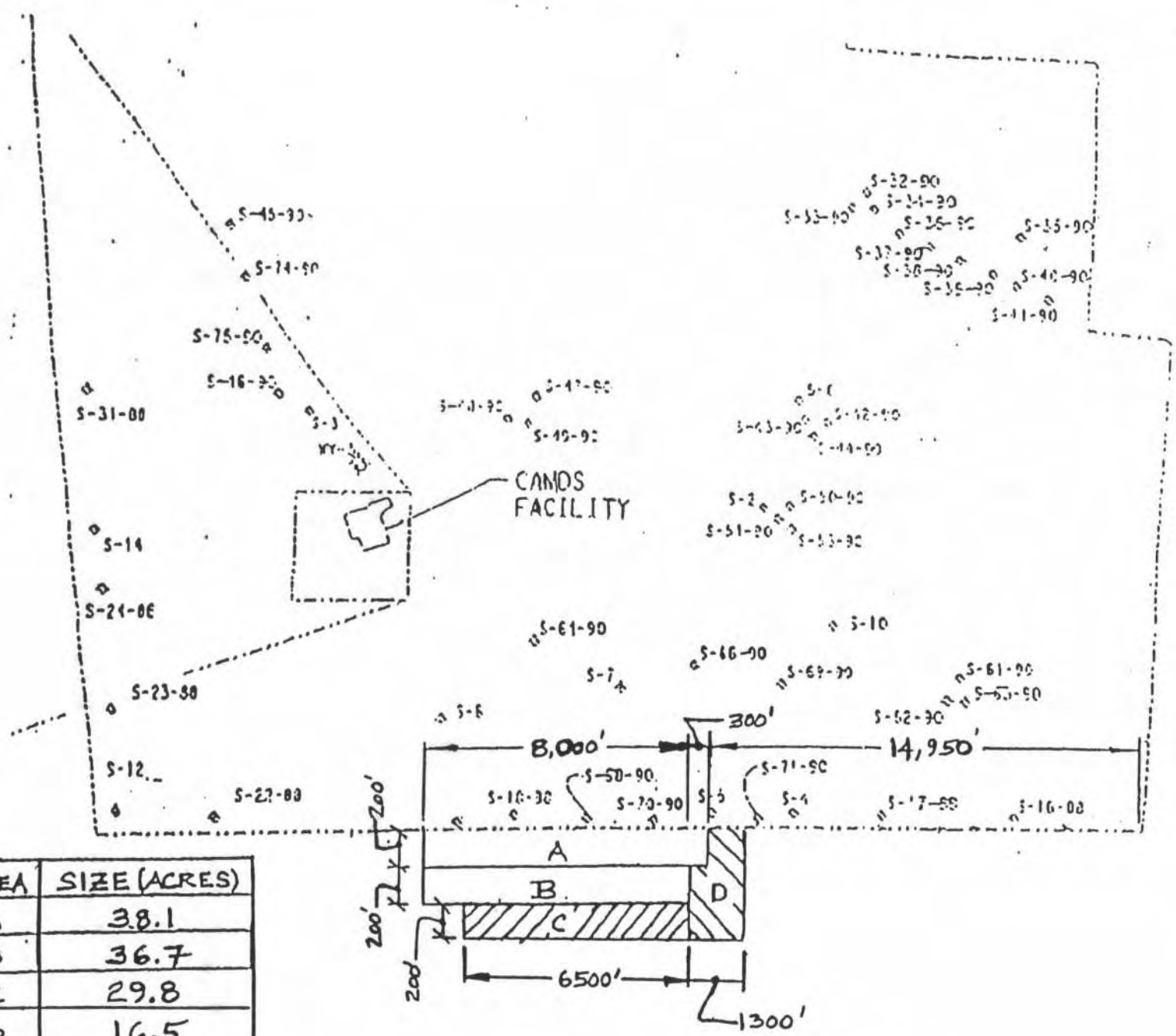
2.0 OBJECTIVE. The contractor shall safely locate, identify, and dispose of all UXO located on the site.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK 1: SITE VISIT AND WORK PLAN (WP). This task shall be accomplished in accordance with Section C, subsection 3.2.1 of the basic contract.

3.1.1 Site Visit. The site visit team shall not exceed three persons, of which one person shall be the Senior UXO Supervisor,

DACA87-92-D-0133
Delivery Order 010 Mod 07



AREA	SIZE (ACRES)
A	3.8.1
B	36.7
C	29.8
D	16.5

FIG. 1
REVISED 20 JUNE 94

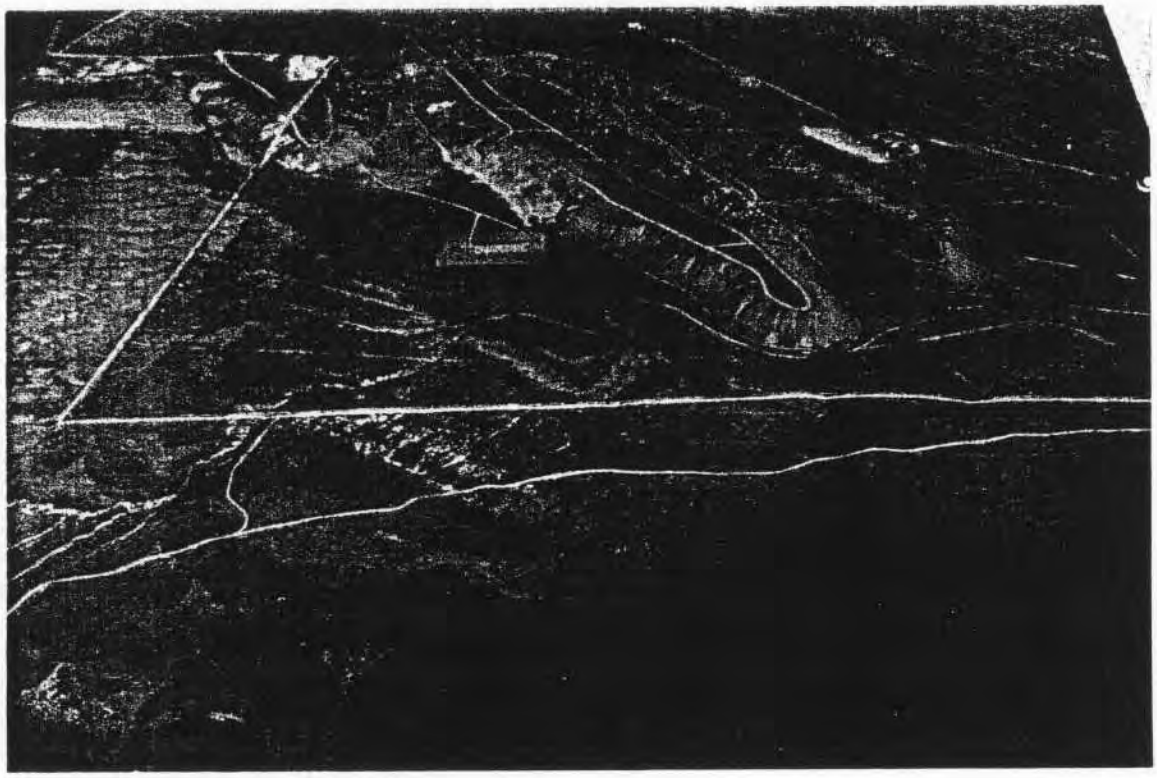
TOOELE A.D. - S. POST

APPENDIX C

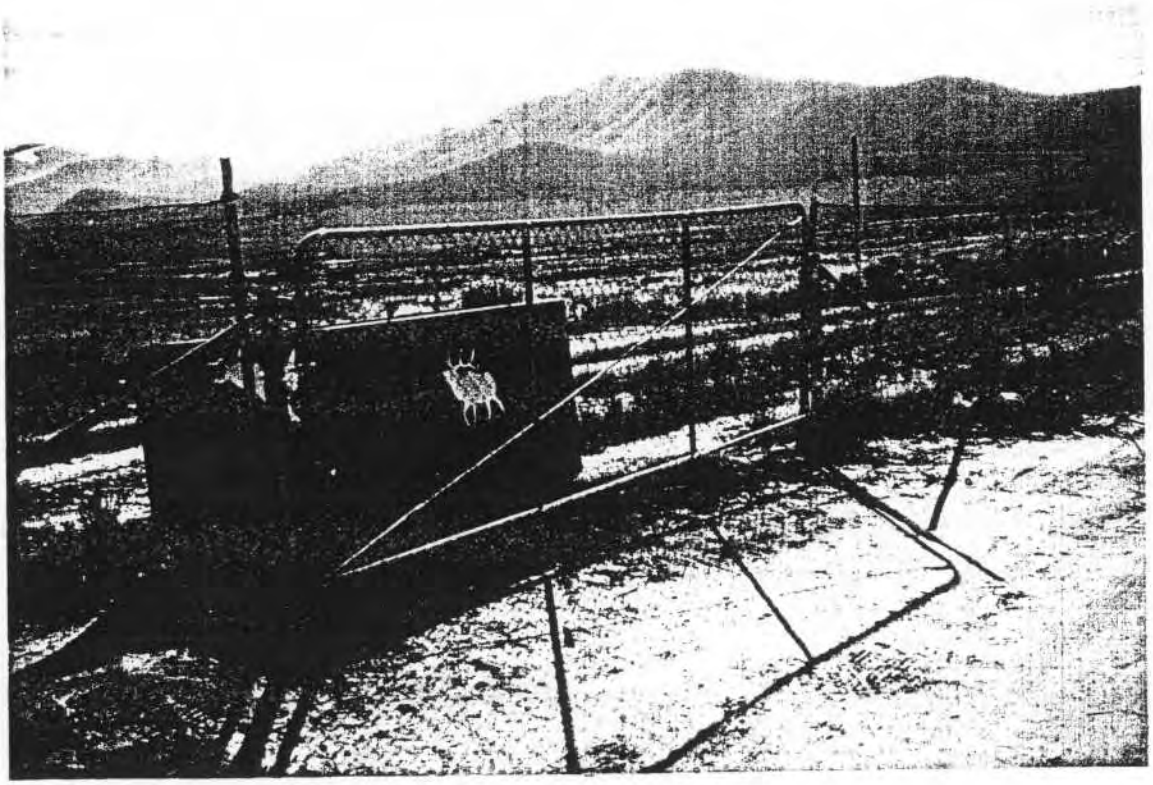
PLANIMETRIC MAP

APPENDIX D

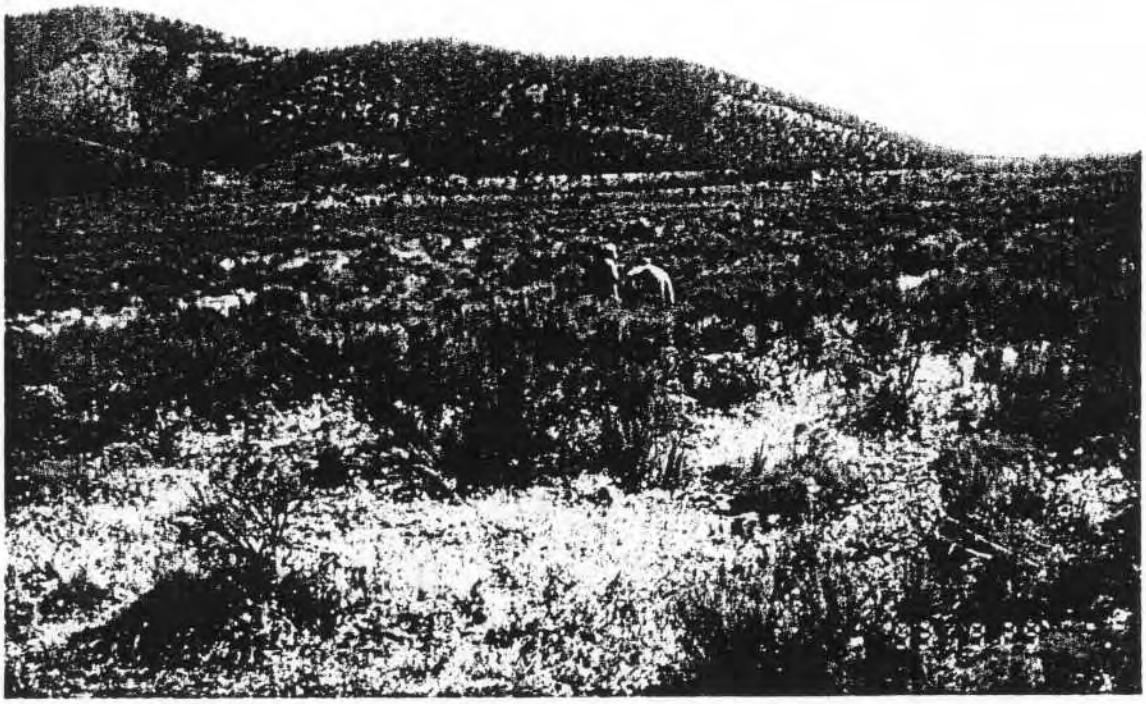
PHOTOGRAPHS



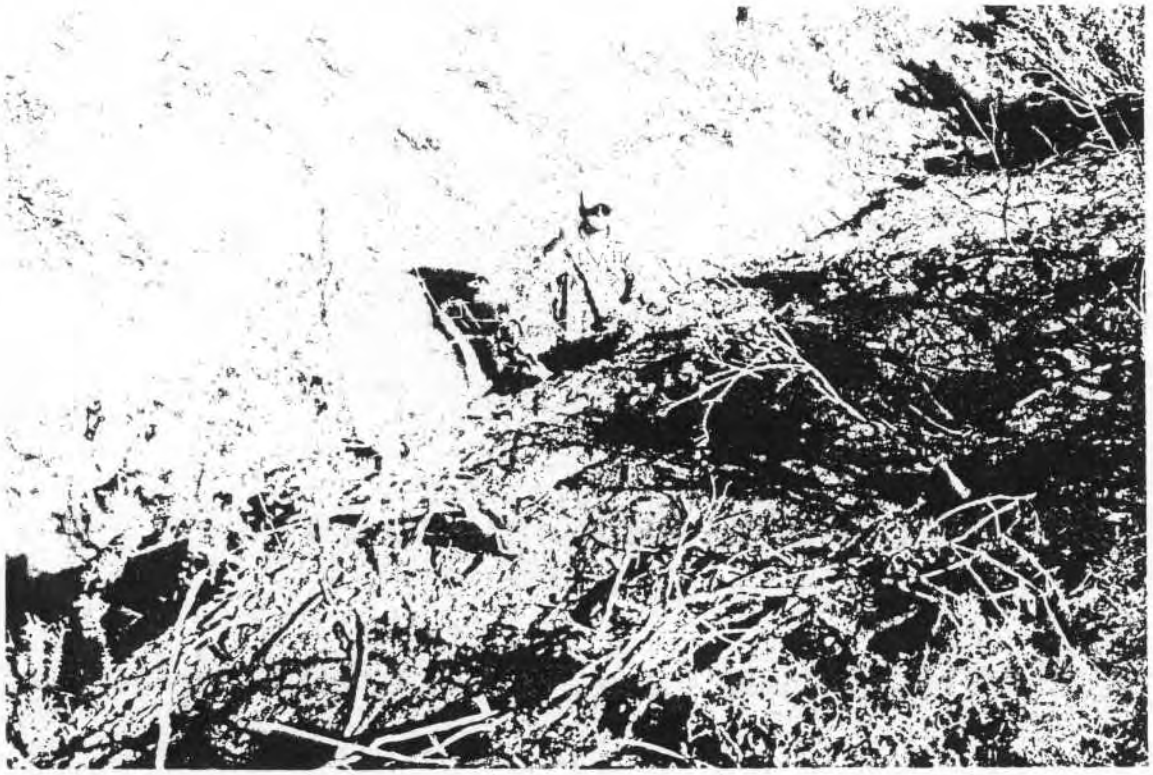
Tooele N: Aerial photo showing fence line
and demo area.



Tooele N: Scrap container, looking east
from the fence line.



Tooele N: HFA personnel sweeping Area A.

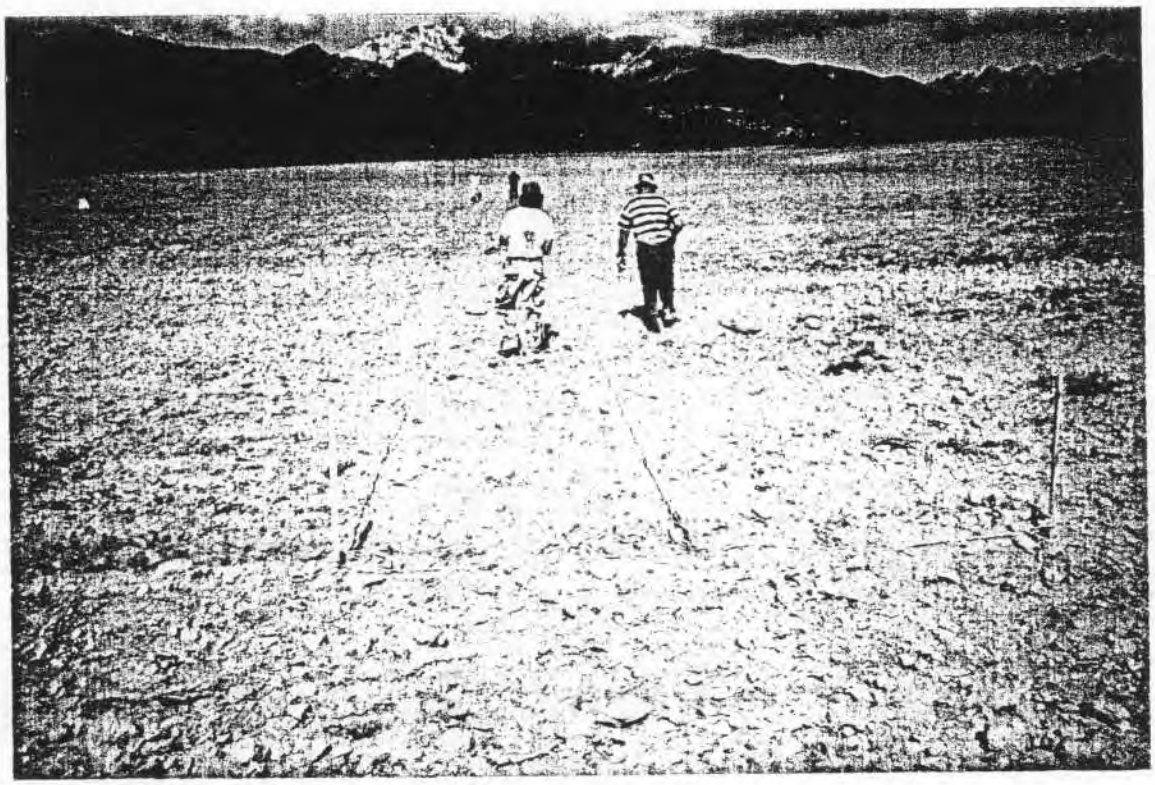


Tooele N: Ditch after burning.

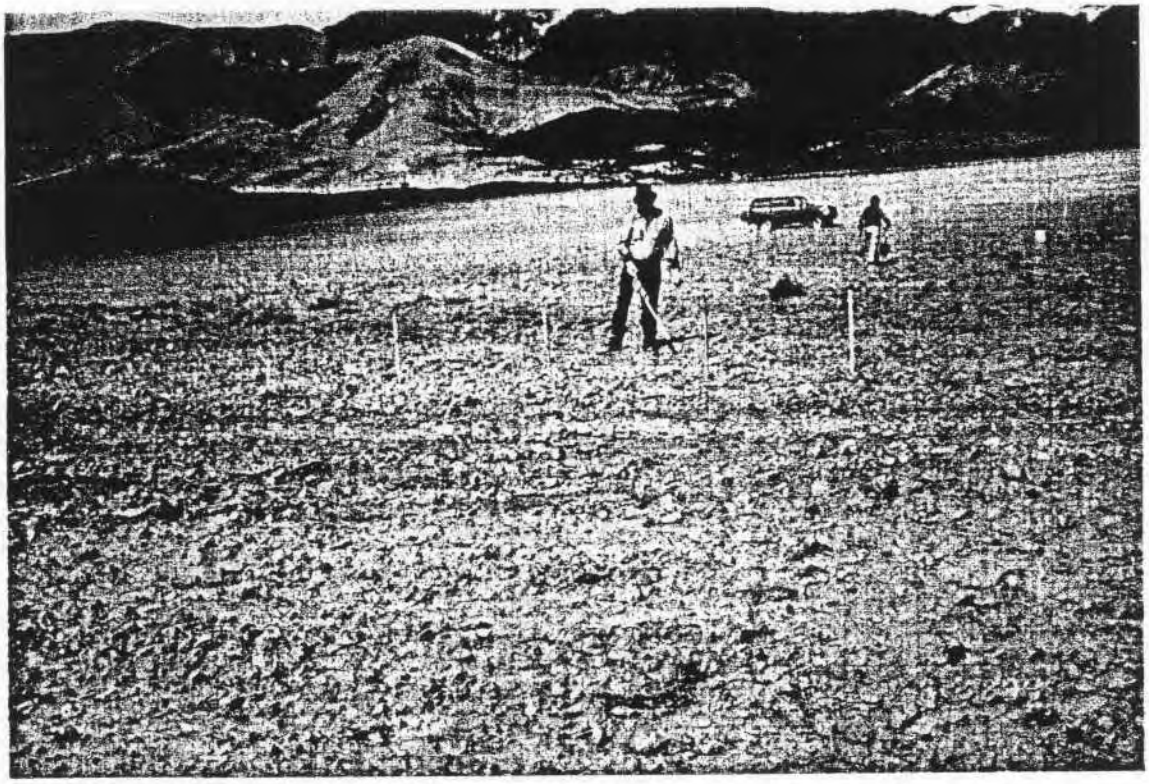
Tooele N: Magnetometer sweep of ditch.

Tooele N: Magnetometer sweep of ditch
after burning.

Tooele N: Magnetometer sweep.

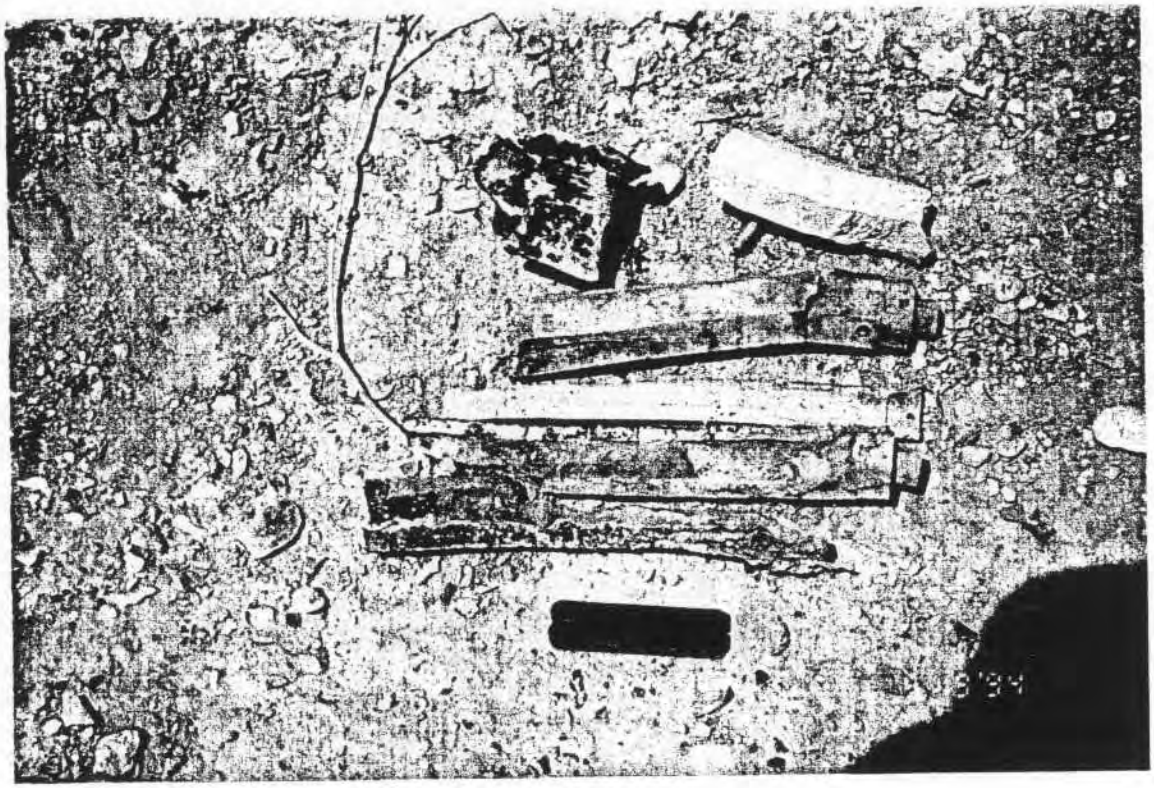


Tooele N: Sweep lanes.

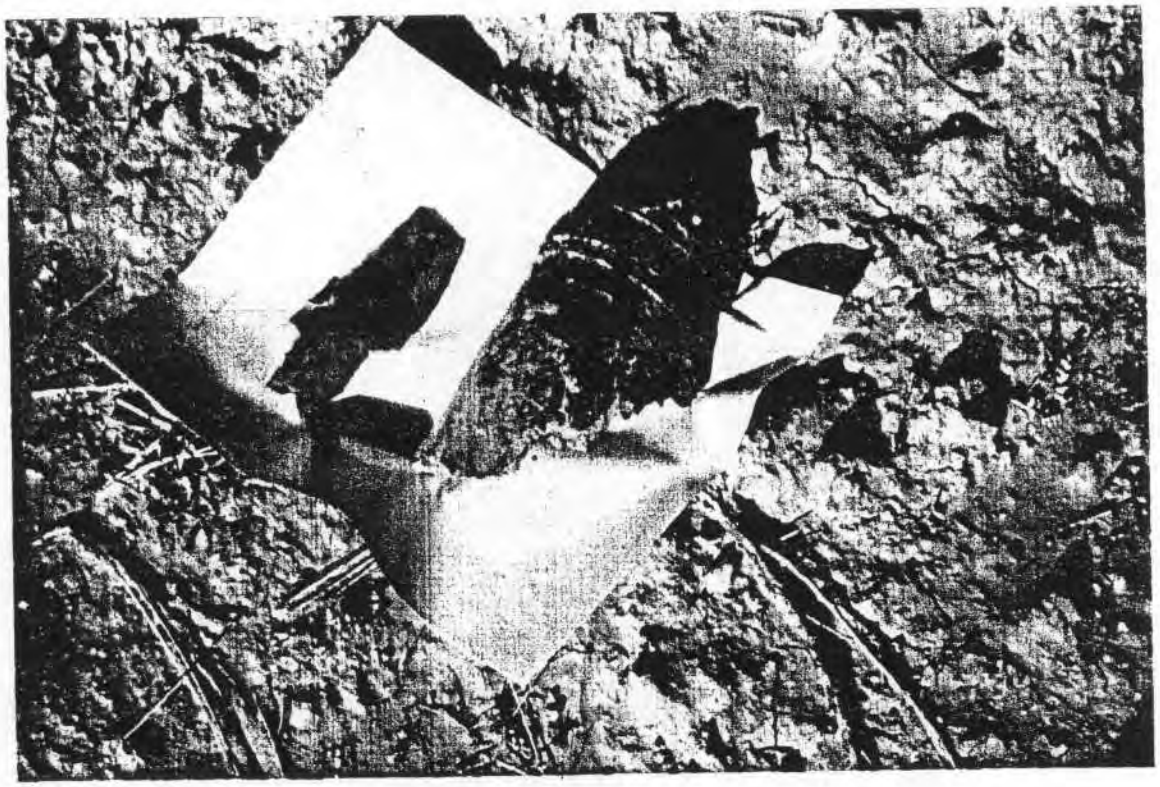


Tooele N: Magnetometer sweep.

Tooele N: TEAD burn operation in background.



Tooele N: Magnesium bomblets.



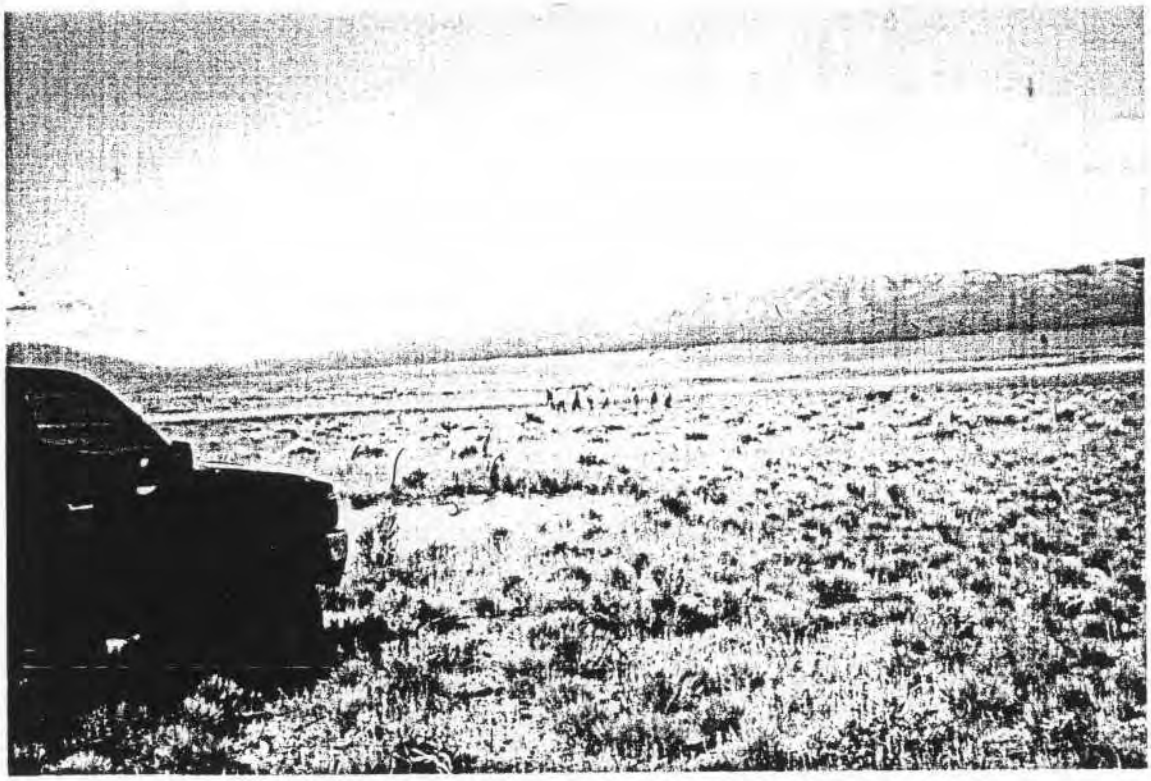
Tooele N: Large projectile fragments,
Area D.

Tooele N: The first new piece of frag located.

Tooele N: New frag, Grid B50A, after area had been swept.

Tooele N: Picture after first shot. Good, clean shot, only residue in sandbags.

Tooele S: Surface sweep in sagebrush.



Tooele S: Surface sweep.

Tooele S: MK42, 100 lb bomb, located
south of original search area.

Tooele S: M70, 115 lb bomb, located
south of original search area.

Tooele S: 90mm HEAT, first shot.