

CA-B92



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 27TH SUPPORT GROUP (TAC)
CANNON AIR FORCE BASE, NM 88103



23 MAR 1992

Dr. Herbert Grover
Permit Coordinator
Hazardous & Radioactive Material Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, NM 87502

Dear Dr. Grover

Enclosed please find the 30% design submittal for the Landfill 5, Cell 3 cap.
Please review and provide comments for this project to Cannon AFB by
27 Mar 92.

Please contact Mr. Jim Richards at 784-4639 if you have any questions or
require additional information.

FOR THE COMMANDER

TIMOTHY G. WISE, Major, USAF
Base Civil Engineer

- Appendix A - Request to provide design & construction specs
B - Summary of field activities CAEB to det. location
C - Core Sample results
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DEPARTMENT OF THE
ALBUQUERQUE DISTRICT CORPS OF ENGINEERS
P. O. BOX 1580
ALBUQUERQUE, NEW MEXICO 87103-1580
FAX (505) 766-2770

REPLY TO
ATTENTION OF:

CESWA-ED-G (200-1c)

16 March 1992

MEMORANDUM FOR Commander, Tulsa District, ATTN: CESWT-EC-GP/
Bob Wilson

SUBJECT: 30% Design Submittal for Cell #3, Landfill #5, Soil Cap
at Cannon AFB, NM

1. Enclosed are two copies of the 30% Design Submittal for Cell #3, Landfill #5, Cannon AFB. Please review and provide comments for this project to the Albuquerque District by 27 March 1992.
2. If you have any questions or require additional information please contact Mr. Mark Wittrock at (505) 766-1722.

FOR THE COMMANDER:

A handwritten signature in cursive script, appearing to read "G. Gamel".

Encl

GARY L. GAMEL, P.E.
Chief, Engineering and Planning Division

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LANDFILL #5, CELL #3
SOIL CAP
Cannon AFB, New Mexico
FY 92

30% DESIGN

1. General. The project consists of providing a soil cap cover and tying into the existing cap for Sanitary Landfill #5, Cell #3 at Cannon Air Force Base (CAFB), New Mexico. Cell #3 was in operation when the "land ban" regulations went into effect and the cell has been documented to have received contaminants for disposal. These contaminants consisted of solvents, paints, paint removers, and thinners.

Closure and Post Closure Plan, Plans, and Specifications for Landfill Cell #3 were developed by Hazard Materials Technical Center, 11140 Rockville Pike, Rockville, Maryland 208552, in October 1988. This Cap was constructed as per plans and specifications. CAFB Environmental Section later determined that the location of this cap did not cover the entire area of cell #3. The CAFB Environmental Section requested the US Army Corps of Engineers, Tulsa District, to develop a set of plans and specifications for a soil cap for cell #3. Subsequently, the Tulsa District brokered this work to the Albuquerque District. (See Appendix A)

2. Subsurface Conditions.

Geology. Cannon Air Force Base is in the Great Plains Physiographic Province on the Llano Estacado. The Quaternary surficial deposits are commonly eolian sand, loess and colluvium which have been deposited on the Ogallala Formation, of late Tertiary age. The Ogallala Formation is a complex sequence of alluvial strata deposited during Miocene and Pliocene time. These strata are well exposed at many localities along the escarpments that characteristically define the physiographic limits of the Llano Estacado. In the vicinity of Cannon AFB, the Ogallala Formation included lenticular beds of clay, silt, sand and mixtures of sand and gravel. Caliche is normally present in the uppermost part of the formation. The Ogallala Formation is 350 feet to 400 feet thick in the vicinity of Cannon AFB. Unconformably underlying the Ogallala Formation are a series of "red beds" assigned to the Dockum Group of Triassic age. The Dockum Group is composed of siltstone, mudstone and interbedded silty to clayey, very fine to fine grained sandstone.

3. Subsurface Investigations.

Site investigations for the proposed cell #3 cap were performed during 22 January 1985, 14 thru 16 January 1992, and 28 February 1992 to present.

In January 1985, two 9-inch diameter cores, 40-feet deep, were taken from the landfill cell. Six samples from the core (depths of 10, 15, 20, 25, 30 and 40 feet) were analyzed for chromium, lead, arsenic, tin, mercury, and volatile organics. The results of the tests detected <0.001 ppm of volatile organics and no organic solvents present in the core samples. (See appendix C)

In January 1992, cell #3 was trenched to determine the extent of the cell. (See appendix B for trenching report). The trenching showed that cell #3 was approximately 800-feet long and 50-feet wide, with 10-foot barriers between adjacent cells.

In February 1992, two 4-inch field permeameters were installed at depths of 20-feet below existing ground level and 6-inch undisturbed Denison can samples were taken at each hole at depths between 18 to 20 feet below existing ground level. Permeameter #1 is located on the east side of landfill #5, approximately 750-feet north of the SE corner of the landfill. Permeameter #2 is located on the south side of landfill #5, approximately 600-feet west of the SE corner of the landfill. The undisturbed samples were delivered to the Southwest Division Laboratory for the following tests: soil classification, moisture content, Atterberg limits, specific gravity, and permeability. The preliminary tests results from the undisturbed samples show an average permeability of 5.7×10^{-5} cm/sec (See appendix D). The field permeability tests are still being conducted by personnel from the Albuquerque District Corps of Engineers.

4. Design Requirements. The Cap shall be designed to satisfy all state and federal closure regulations.

State requirements include the following:

- Provide long-term minimization of migration of liquids through the closed landfill cell.
- Function with minimum maintenance.
- Promote drainage and minimize erosion and abrasion of the cover.
- Accommodate settling and subsidence so that the cover's integrity is maintained.
- Have a permeability less than or equal to the permeability of any bottom liner system of natural subsoils present.

Federal requirements are identical to the state of New Mexico as per Code of Federal Regulations, Protection of Environment, 40 (CFR 40), Revised as of July 1, 1991, Section 265.310.

CAFB requirements:

- Meet all Federal and State requirements
- The cap shall be designed for ease of integration and tie-in to future landfill cell cap(s).

5. DESIGNS:

To meet the state and federal closure regulations and CAFB requirements, the following design considerations were addressed.

Rain fall intensity (1% Storm) - 5.30"/acre
Storm duration - 20 minutes
Area Considered - 40 acres
Runoff - 85 cfs

It was determined that the most economical means of controlling runoff and erosion is to utilize sheet flow for the runoff and reseed the area with native grasses to minimize the erosion. The site will be graded to facilitate future grading for closures at Landfill #5.

Two design alternatives were analyzed for the cell #3 cap based on the preliminary undisturbed permeability (See Drawings Sheet 4 & 5 for Details):

Option #1 - based on the undisturbed sample average permeability of 5.7×10^{-5} cm/sec, it is recommended that the following cap system be utilized.

- 6-inches Bedding Material consisting of crusher fines.
- 24-inches soil cap material consisting of a Clayey Sand (SC) or Low to Medium Plasticity Clay (CL) soil with a maximum permeability of 1×10^{-6} cm/sec
- 12-inches Biobarrier material consisting of gravel, sands, and fines (approx. 30% passing the #200 sieve). This is used to hinder burrowing animals.
- 12-inches Minimum of cover soil consisting of Silty Sand (SM), Clayey Sand (SC), Low Plasticity Silt (ML), or Low to Medium Plasticity Clay (CL). If cost effective this could be the same material as the soils cap material.

Option #2 - A geocomposite system may be cost effective based on preliminary cost estimates. This cap system was analyzed and the following cap system it is recommended if is more cost effective than the soil cap system (option #1):

- 12-inches Bedding Material consisting of crusher fines.
Non-woven filter fabric
- 40-mil Geocomposite liner with bentonite (Gunseal or equivalent) permeability of 3×10^{-10} cm/sec
- 24-inches Minimum of cover soil consisting of SM, SC, ML, or CH, this could be the same material as the soils cap material if cost effective.

Total settlements of 5-15% of the cell depth can be expected for Cell #3. Approximately 80% or more of this settlement should have occurred over the last 10-years since the cell was last utilized. This leaves approximately 7-inches

of additional settlement which may occur. It can be anticipated that 3-4 inches of settlement will be induced during construction. The remaining 3-4 inches of settlement should occur uniformly over the next 30+ years. Both options should be able to withstand up to 1-inch of differential settlement with out damage to the cap systems.

6. COST ESTIMATE:

A 30% cost estimate was performed for the two options. The cost for each system are as follows:

OPTION #1	COST	\$171,991.00
	25% CONTINGENCY	<u>\$42,999.00</u>
	TOTAL	\$214,990.00
OPTION #2	COST	\$184,650.00
	25% CONTINGENCY	<u>\$46,163.00</u>
	TOTAL	\$230,813.00

It is felt that the 30% cost estimates are close enough that both design options should be considered for further design.

ALBUQUERQUE DISTRICT - MARCH 1992

APPENDIX A

REQUEST TO PROVIDE DESIGN
AND
CONSTRUCTION SPECIFICATIONS
FOR
SOIL CAP, LANDFILL #5, CELL #3
CANNON AFB, NM



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
TULSA DISTRICT, CORPS OF ENGINEERS
POST OFFICE BOX 61
TULSA, OKLAHOMA 74121-0061

6 FEB '92

CESWT-DE (200)

MEMORANDUM FOR Commander, Albuquerque District

SUBJECT: Landfill 5/Cell 3 Cap Design for Cannon Air Force
Base (AFB), NM

1. Corps support has been requested to provide design and construction specifications for the placement of a final cover on Cell 3 in Landfill 5 at Cannon AFB. Cannon AFB requires that the design and construction specifications be completed in time to allow a construction award for the cap during FY92. Your office has faxed a schedule and cost estimate that meets this requirement.

2. Mr. Mark Wittrock, Albuquerque District, met in Tulsa District on 21 and 22 January to discuss landfill cap design requirements and to develop a schedule for completion of both design and specifications. A kickoff meeting for the design was scheduled for 12 February at Cannon Air Force Base. Your personnel stated that it was within their capability to accomplish this work with technical support from the Tulsa District.

3. I request that the Albuquerque District formally accept this mission and the required work for the design of the landfill cap project at Cannon AFB. The design shall meet the requirements stipulated in the enclosed scope of work (encl 1). Tulsa District will provide technical support and will perform technical review on all deliverables.

4. A Military Interdepartmental Purchase Request for \$39,200 will be forwarded for your design requirements. Formal acceptance of this mission is requested by 7 February 1992. A 1st Endorsement to accomplish this is at enclosure 2.

5. Point of contact is Mr. Robert Wilson at FTS 745-6148.

2 Encls

f Pgm Turner
F. E. SMITH, JR.
Colonel, EN
Commanding

P. J. WOODS, JR.
Lieutenant Colonel
Deputy Commanding

CANNON AFB
LANDFILL 5 - CELL 3 CAP DESIGN

Scope of Work

1. **Introduction.** Cannon Air Force Base is a U.S. Department of Defense facility located in Curry County west of Clovis, New Mexico. Landfill 5 - Cell 3 is located on the southeast corner of the base. Cell 3 was in operation during the 1981-1982 timeframe and was known to have received waste oil and solvents. In 1989, the cell was covered with a clay and flexible membrane cover. It was later determined that the cover was incorrectly located. The Tulsa District conducted an investigation during January 1992, which determined the actual boundaries of Cell 3 (the results of this investigation has been forwarded to Cannon AFB and Albuquerque District). Cannon Air Force Base has set aside FY92 funds for the construction of the new landfill cap for Cell 3. To award a construction contract by the end of FY92, the schedule for completion of design and specifications should include sufficient lead time to allow procurement of the contract.

2. **Design and Specification Work.** Cannon Air Force Base is studying options for the closure of Landfill 5 (ie. construct one contiguous cap covering all cells in the landfill or construct separate caps over each cell). According to Cannon, a decision on this should be available by 15 March 1992. If a contiguous cap is chosen, the cap for Cell 3 must be designed to allow its future integration into the landfill cap. The cap shall be designed to satisfy all state and federal closure regulations. The state's requirements include the following:

-Provide long-term minimization of migration of liquids through the closed landfill cell.

-Function with minimum maintenance.

-Promote drainage and minimize erosion and abrasion of the cover.

-Accommodate settling and subsidence so that the cover's integrity is maintained.

-Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

The Albuquerque District will perform the design and write the specifications for this project with technical support from the Tulsa District. The Albuquerque District will submit a schedule for 30%, 95% (Advance Final), 100% (Final) Design completion.

APPENDIX B

SUMMARY OF FIELD ACTIVITIES
CANNON AFB
TO DETERMINE LOCATION OF CELL #3
by
TULSA DISTRICT CORPS OF ENGINEERS

1 of 7
Received
1/27/92
M4

SUMMARY OF FIELD ACTIVITIES CANNON AFB, CLOVIS, NEW MEXICO

Prepared By: Jo Brady
Geology Section
Monday, January 27, 1992

PURPOSE: To determine the areal extent of Cell 3 by excavating trenches in both east-west and north-south directions. The State of New Mexico and the EPA are requiring Cannon AFB to place an impermeable soil cover over Cell 3 as it was in operation when the "land ban" regulations went into effect and the cell has been documented to have received solvents for disposal.

The site, Cell 3, is located in Sanitary Landfill Number 5, which in the southeastern corner of the base.

Tuesday, January 14, 1992

Arrived onbase at 1400 local time (New Mexico is on mountain time). Located project geologist Jim Martell and operator Jerry Camp onsite. Jerry was operating a rented John Deere 690D-LC trac-hoe from Yellowhouse Machinery, Amarillo, Texas. Excavation of a north-south trench had commenced from the south and was progressing upwind to the north. Excavated soil/trash was stockpiled adjacent to the trench so that it could be replaced upon completion of the trenching activities.

On the previous day (Monday), Jim Martell had located, measured, and staked the line for excavation a total length of 1000 feet. The centerline of the trench was approximately 15 feet west of the fenced area (refer to enclosed figure). To determine the length of time the cell was in operation, old newspapers were collected from the excavated piles of soil/trash and stored individually in plastic ziploc bags. Typically the layers of trash were 1-2 feet thick and separated by 6-12 inches of soil. Cover soil was placed over the trash 2-3 feet thick, however there was a veneer of trash spread over the cell which appeared erratically about 2 feet below the surface. Average depth of the excavation was 8-10 feet, although select areas were excavated to depth of 18 feet to locate the bottom of the cell.

Approximately 150 feet of the trench was excavated by the end of Tuesday.

Jim Martell returned to Tulsa Wednesday morning and Jo Brady directed the work.

Wednesday, January 15, 1992

Temperature with wind chill was -20 degrees F, winds from the north.

Work commenced at 0730. Continued excavating the north-south trench, obtaining dated material (newspapers) when available. At random intervals, the trench was excavated to depths of 18 to 19 feet (as the trench would allow) to determine the depth of the cell; but the total depth of the cell could not be determined. Historic reports indicate the depth could be as great as 25 feet, but no trac-hoe was available to dig to this depth. Native, undisturbed soil was encountered 650 feet north from the southwest corner of the fenced area. The soil/trash layers were observed to be spread to the sloped interface of native, undisturbed soil - refer to figure 2. Following confirmation of the cell's north limit, activities commenced to fill in the trench.

While soil/debris was being dozed into the trench, Mark Wittrock, Civil Engineer from the Albuquerque District, arrived to review the work. Mark is scheduled to design the soil cover for the cell. Jo Brady familiarized Mark with the scope of work and presented her observations of the cell. Each drove to the base Corps of Engineers office to inform Jim Richards, the base point-of-contact, that the work had been completed. Jim Richards was concerned that he did not have enough information available from the work just completed to define the areal extent of Cell 3. Jo Brady agreed to return Thursday to excavate more of the cell until its boundaries could be defined.

Thursday, January 16, 1992

Temperature with wind chill was -3 degrees F, winds from the north gradually changing in the afternoon to southerly winds and a high in the 30's.

Jo Brady met Mark Wittrock at the base COE office at 0730 to confirm the day's activities with Jim Richards. Jo Brady drove to the site at 0800 and drove Jerry Camp to town for a transfer pump to switch fuel from the tractor-trailer to the trac-hoe. Trenching activities recommenced at 0900 extending the north-south trench to define the southern boundary of the landfill. Jo Brady was joined by Mark Wittrock and Glenn Woodson (Jim Richards' representative) to observe the work. The southern boundary of the

trench was defined to be 150 feet south from the SW fencepost of the fenced area. Mark Wittrock and Jo Brady measured the vertical change in relation to the horizontal difference to calculate the slope of the trench. The slope was conservatively determined to be no steeper than 3H:1V (see figure 2) and the overall cell length was determined to be 800 feet.

East-west trenches were excavated until undisturbed native soil was encountered both north and south of the fenced area to further define the cell boundaries. Cell 3 was measured to be 50 feet wide; 35 feet from the western fence line of the fenced area and 15 feet to the east of the western fence line. A second north-south trench was excavated between the 250 and 300 foot mark as Jo Brady had observed an area of apparently clean fill and this was approximately one-half the length of the entire trench. Jim Martell had speculated that there may be two cells with a native soil barrier or berm between rather than one long cell. No barrier or berm was observed in the second north-south trench. Refer to figure 1 for location of various excavations.

Typically the trash consisted of household refuse and office waste. Tires and other automotive items were occasionally observed as was medical waste in the form of syringes and intravenous bags. A "solvent" smell was noticed in two trenches (see figure 1 for locations). At one of these locations, Mark Wittrock observed free liquid draining into the soil from a container disturbed by the excavation activities.

Jim Richards stopped by towards the end of the day to briefly observe the work and was pleased with the progress and results. Excavation was halted at 1700 due to impending darkness; excavation would continue Friday morning at 0800.

Friday, January 16, 1992

Weather was overcast and cold throughout the day, with winds from the north.

Jo Brady stopped at the base COE office at 0730 to outline the day's activities with Jim Richards. Jim requested that the extent of the native soil barriers separating Cell 3 from surrounding cells be determined by extending the east-west trenches into the adjacent cell and obtaining dated material from them. Jo Brady expressed her concern of potential cross-contamination to Jim Richards when he visited the site after the eastern cell had been

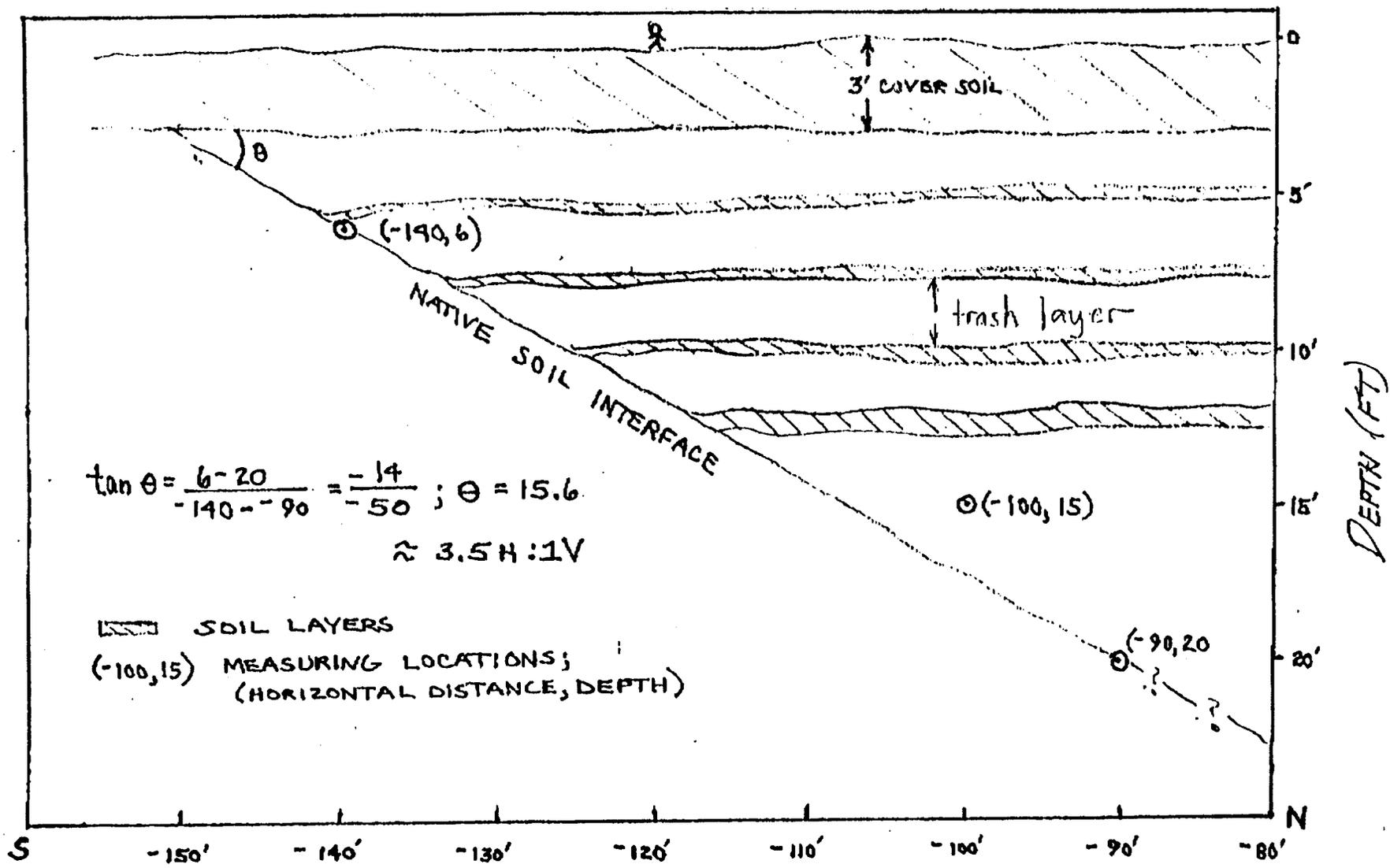
SUMMARY OF FIELD ACTIVITIES
CANNON AFB, CLOVIS, NEW MEXICO

encountered. Jim was aware of Jo Brady's concern; however he said the State had specifically requested the width of the soil barrier be determined. It was agreed that an attempt to reduce the potential for cross-contamination would be made by minimizing the amount of soil barrier excavated until the adjacent cell was encountered. An average of 10 feet separated Cell 3 from the adjacent cells on each side. The newspaper obtained from the cell to the east of Cell 3 yielded a date of 1978, while the date from the cell to the west was 1979. Only Glenn Woodson observed the day's activities as Mark Wittrock was returning to Albuquerque.

Excavation activities concluded approximately 1100. The trenches were filled in the afternoon.

The site was inspected after all the trenches had been refilled and compacted by the equipment driving over it. Although the debris visible at the surface was unavoidable, further work may be necessary to cover the debris to prevent a safety hazard to the flightline of blowing trash.

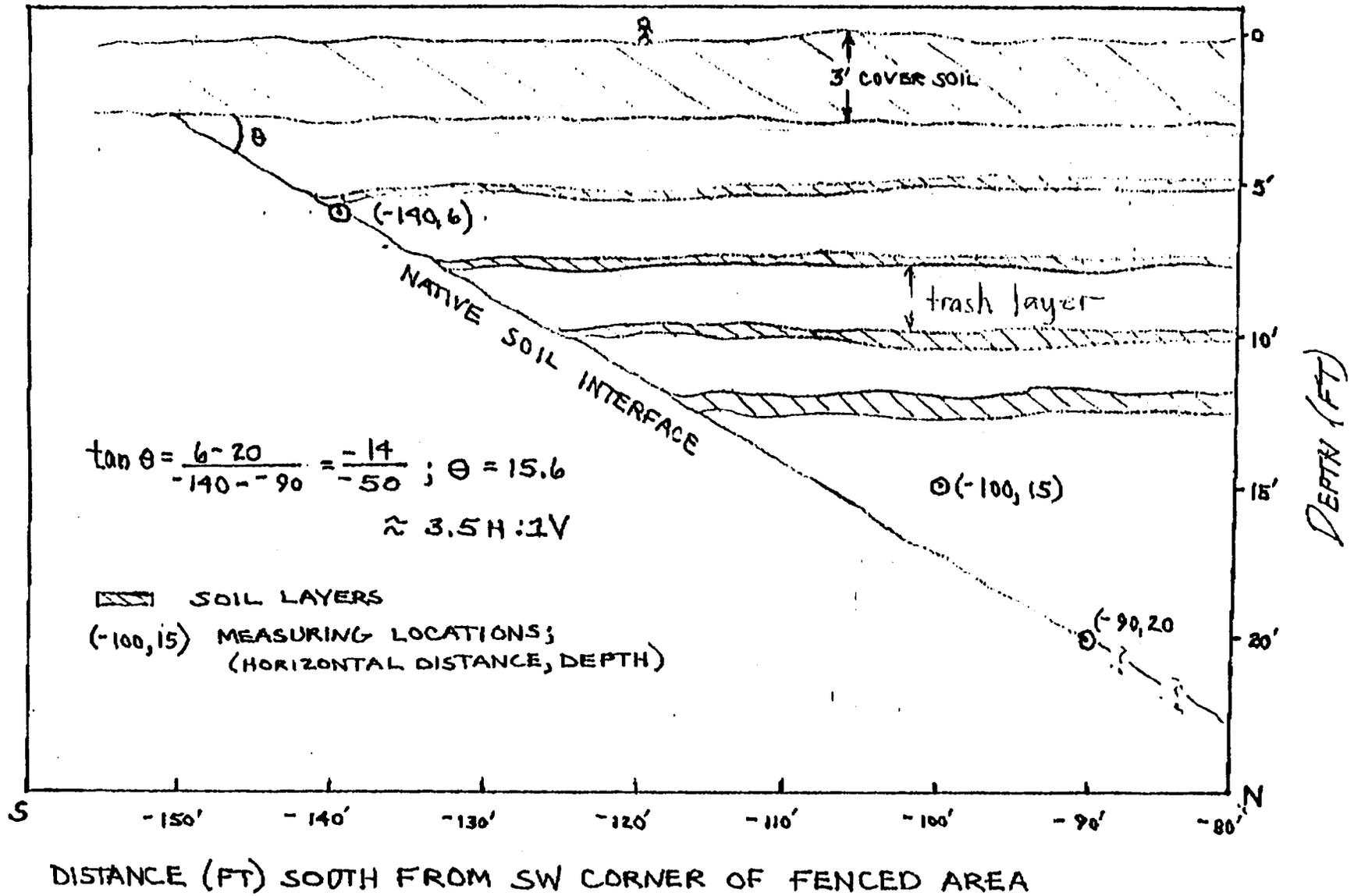
Jo Brady stopped by the base COE office to inform Jim Richards that the work had been completed and the trenches filled. Jo Brady indicated there was debris at the surface which may require further attention and informed Jim to expect a report of the field activities sometime next week. Jo Brady left the base at 1730; Jerry Camp drove the equipment to the hotel for an early departure Saturday morning. The rental company was contacted to pick up the trac-hoe. It was arranged to leave the trac-hoe at the site outside the locked gate where it would be picked up on Tuesday.



DISTANCE (FT) SOUTH FROM SW CORNER OF FENCED AREA

CANNON AFB
SANITARY LANDFILL 5
PARTIAL CROSS-SECTION OF CELL 3

FIGURE 2



CANNON AFB
SANITARY LANDFILL 5
PARTIAL CROSS-SECTION OF CELL 3

FIGURE 2

APPENDIX C

CORE SAMPLES RESULTS*

* Extracted from "CANNON AIR FORCE BASE CLOSURE OF CELL NO.3 OF LAND FILL AREA 5, DESIGNS AND SPECIFICATIONS, FINAL DRAFT" dated 24 June 1988, by HMTC.

APPENDIX C
CORE SAMPLE RESULTS

Two 9-inch diameter cores of 40-foot depth were removed from the landfill trench on January 22, 1985. Six samples from each core (depths of 10, 15, 20, 25, 30, and 40 feet) were analyzed for chromium, lead, arsenic, tin, mercury, and volatile organics. The metals analyses were accomplished by nitric acid digestion/atomic adsorption spectroscopy and the volatile organics were analyzed using gas chromatograph mass spectrometry. Table C-1 summarizes the composite results of these analyses.

Table C-1. Core Analyses

<u>Constituent</u>	<u>Concentration (ppm)</u>	<u>Detection Limit (ppm)</u>
Chromium	14 - 36	0.005
Lead	0.2 - 10.5	0.001
Arsenic	3.70 - 9.61	0.002
Tin	0.5 - 2.0	0.002
Mercury	0.04 - 0.68	0.002
Volatile Organics	< 0.01	0.01

Volatile organics are insignificant in this landfill trench because they are of a low enough concentration at all depths that they are not identified at a 10 ppb detection limit. Effectively, there are no volatile organics available to ever contaminate groundwater. The metal levels appear to be high in these analytical results, but this is not significant because the lowest levels of the value ranges are reached at the 40-foot depth. Very little would be available to groundwater which is 280 feet deeper still (i.e., groundwater is 320 feet below the surface at Cannon AFB). Having been retrieved by using

nitric acid, the metals concentrations are also much higher than they would be if the landfill trench contents were ever contacted with surface or groundwater. Metals and their salts do not ionize in water of neutral pH as readily as they do in nitric acid.

APPENDIX D

LABORATORY AND FIELD TEST RESULTS

PERMEABILITY TEST RESULTS

SWDED-GL

15520

Type of Specimen: UNDISTURBED		Before Test:		After Test:	
Diam(in): 6.09	Ht(in): 3.71	Water Content, wo:	10.1	wf:	19.8
Confining Pressure(psi): 90.0		Void Ratio, eo	0.522	ef:	0.522
Backpressure to saturate: 85.0		Saturation, So:	51.9	Sf:	101.7
Differential Head(psi): 1.0		Dry Density, lb/ft ³ :	109.6		109.6
Class.: *		HYDRAULIC GRADIENT: *			
LL *	Gs 2.68	Project: CANNON AFB			
PL *	D10	* PRELIMINARY DATA			
Permeant Liquid: *		Area:		Boring No. HOLE 1	
Remarks:		Depth: *		Smpl #92/842	
				Date: 4 MAR 92	

	Coefficient of Permeability at 20 deg C.	
Run 1	5.54E-05	CM/SEC
Run 2	6.03E-05	CM/SEC
Run 3	5.23E-05	CM/SEC
Run 4	6.32E-05	CM/SEC
Run 5	6.36E-05	CM/SEC
Run 6	5.24E-05	CM/SEC
Run 7	5.30E-05	CM/SEC
Run 8	5.31E-05	CM/SEC

Average 5.67E-05 CM/SEC

	init.	final
HEIGHT CHANGE, CONSOL, cm	0.00	
WEIGHT OF WET SOIL, g	3434.0	
WEIGHT OF DRY SOIL, g	3119.0	
AREA, cm ²	187.93	
VOLUME, cm ³	1775.0	1775.00
REDUCED HEIGHT OF SOIL, cm	2.438	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS

TIME 08:46:50

TITLE PAGE 1

OPTION #1

30% DESIGN

CELL NO. 3, LANDFILL #5
CANNON AFB, NM

Designed By: ALBQ DIST
Estimated By: ALBQ DIST

Prepared By:

Date: 03/12/92

M C A C E S G O L D E D I T I O N
Composer GOLD Copyright (C) 1985, 1988, 1990
by Building Systems Design, Inc.
Release 5.01D

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
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TIME 08:46:50

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No Detailed Estimate...

No Backup Reports...

* * * END TABLE OF CONTENTS * * *

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS

TIME 08:46:50

SETTINGS PAGE 1

** CONTRACTOR SETTINGS **

AMOUNT PCT PCT S RISK DIFF SIZE PERIOD INVEST ASSIST SUBCON

AA PRIME CONTRACTOR

Field Overhead	P									12.00
Home Office	P									5.00
Profit	P									10.00
Bond	P									2.00
NM Gross Receipts Tax @ 5.375%	P									5.38

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 ** PROJECT OWNER SUMMARY - LEVEL 2 **

TIME 08:46:50

SUMMARY PAGE 1

	QUANTITY	UOM	CONTRACT	CONTING	S&A	TOTAL COST	UNIT

1 CELL NO. 3, LANDFILL #5			113,318	29,580		147,898	
1.AA EARTHWORK			111,800	40,422	0	202,441	
1.AB DEMOLITION			6,120	1,530	0	7,650	
1.AC REMOVAL & STOCKPILE CAP MATERIAL	755.00	CY	1,662	416	0	2,078	2.75
1.AD NEW FENCING			7,663	1,916	0	9,579	
1.AE TESTING			32,676	8,169	0	40,845	
1.AF TEST PAD, COMPLETE			5,562	1,390	0	6,952	

CELL NO. 3, LANDFILL #5			215,371	53,843	0	269,214	

CELL NO. 3, LANDFILL #5			215,371	53,843	0	269,214	
			171,991	42,999		214,990	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** PROJECT INDIRECT SUMMARY - LEVEL 2 **

TIME 08:46:50

SUMMARY PAGE 2

	QUANTY UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT
1 CELL NO. 3, LANDFIL									
1.AA	EARTHWORK	116,284	13,954	6,512	13,675	3,009	8,255	161,689	
1.AB	DEMOLITION	4,401	528	246	518	114	312	6,120	
1.AC	REMOVAL & STOCKP	755.00	143	67	141	31	85	1,662	2.20
1.AD	NEW FENCING	5,511	661	309	648	143	391	7,663	
1.AE	TESTING	23,500	2,820	1,316	2,764	608	1,668	32,676	
1.AF	TEST PAD, COMPLE	4,000	480	224	470	103	284	5,562	
CELL NO. 3, LAND		154,892	18,587	8,674	18,215	4,007	10,995	215,371	
CELL NO. 3, LAND		154,892	18,587	8,674	18,215	4,007	10,995	215,371	
Contingency @ 25%								53,843	
TOTAL INCL OWNER COSTS								269,214	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** PROJECT DIRECT SUMMARY - LEVEL 2 **

TIME 08:46:50

SUMMARY PAGE 3

	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1 CELL NO. 3, LANDFILL #5							46,605	85,093	
1.AA EARTHWORK					9,187	29,247	77,850	116,284	
1.AB DEMOLITION					2,296	2,105	0	4,401	
1.AC REMOVAL & STOCKPILE CAP MATERIAL	755.00	CY			218	977	0	1,195	1.58
1.AD NEW FENCING					2,337	944	2,230	5,511	
1.AE TESTING					0	0	23,500	23,500	
1.AF TEST PAD, COMPLETE					0	0	4,000	4,000	
CELL NO. 3, LANDFILL #5					14,039	33,273	107,580	154,892	123,700
							76,335		
CELL NO. 3, LANDFILL #5 Field Overhead					14,039	33,273	107,580	154,892	123,700
							76,335	18,587	14,844
SUBTOTAL Home Office								173,479	138,544
								8,674	6,927
SUBTOTAL Profit								782,153	145,471
								18,215	14,547
SUBTOTAL Bond								200,369	160,018
								4,007	3,200
SUBTOTAL NM Gross Receipts Tax @ 5.375%								204,376	163,218
								10,995	8,773
TOTAL INCL INDIRECTS Contingency @ 25%								215,374	171,991
								53,843	42,999
TOTAL INCL OWNER COSTS								269,214	214,990

Say 215,000

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR DIRECT SUMMARY **

TIME 08:46:50

SUMMARY PAGE 4

QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
AA		PRIME CONTRACTOR		14,039	33,273	107,580 76,335	154,892 123,700	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR DIRECT SUMMARY - LEVEL 2 **

TIME 08:46:50

SUMMARY PAGE 5

	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AA. EARTHWORK									
AA PRIME CONTRACTOR					9,187	29,247	77,850 46,605	116,284 85,043	
1.AB. DEMOLITION									
AA PRIME CONTRACTOR					2,296	2,105		4,401	
1.AC. REMOVAL & STOCKPILE CAP MATERIAL									
AA PRIME CONTRACTOR					218	977		1,195	
1.AD. NEW FENCING									
AA PRIME CONTRACTOR					2,337	944	2,230	5,511	
1.AE. TESTING									
AA PRIME CONTRACTOR							23,500	23,500	
1.AF. TEST PAD, COMPLETE									
AA PRIME CONTRACTOR							4,000	4,000	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR INDIRECT SUMMARY **

TIME 08:46:50

SUMMARY PAGE 6

QUANTY	UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT
AA	PRIME CONTRACTO	154,892	18,587	8,674	18,215	4,007	10,995	245,371	
		123,700	14,844	6,927	14,547	3,200	8,773	171,991	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR INDIRECT SUMMARY - LEVEL 2 **

TIME 08:46:50

SUMMARY PAGE 7

QUANTY UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT
1.AA. EARTHWORK AA PRIME CONTRACTO	116,284	13,954	6,512	13,675	3,009	8,255	161,689	
1.AB. DEMOLITION AA PRIME CONTRACTO	4,401	528	246	518	114	312	6,120	
1.AC. REMOVAL & STOCKPILE CAP MATERIAL AA PRIME CONTRACTO	1,195	143	67	141	31	85	1,662	
1.AD. NEW FENCING AA PRIME CONTRACTO	5,511	661	309	648	143	391	7,663	
1.AE. TESTING AA PRIME CONTRACTO	23,500	2,820	1,316	2,764	608	1,668	32,676	
1.AF. TEST PAD, COMPLETE AA PRIME CONTRACTO	4,000	480	224	470	103	284	5,562	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 1

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1. CELL NO. 3, LANDFILL #5										
1.AA. EARTHWORK										
1.AA.01. CLEAR AND GRUB										
USR <	> Equipment Operator, G	4.00	HR	C-EQOPER4	1.00	11.78 47	0.00 0	0.00 0	11.78 47	11.78
USR <	> Laborer, Group 1	4.00	HR	C-LABORER1	1.00	7.76 31	0.00 0	0.00 0	7.76 31	7.76
MIL <	> DOZER,CWLR,D-7H,LGP,C	4.00	HR	T15CA014	1.00	0.00 0	60.71 243	0.00 0	60.71 243	60.71
MIL <	> BLADE, UNIVERSAL,HYDR	4.00	HR	T10CA013	1.00	0.00 0	5.32 21	0.00 0	5.32 21	5.32
USR <	> Foreman	4.00	HR		0.00	18.00 72	0.00 0	0.00 0	18.00 72	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	4.00	HR	T50FO003	1.00	0.00 0	6.28 25	0.00 0	6.28 25	6.28
	CLEAR AND GRUB	7200.00	SY			150	289	0	439	0.06
1.AA.02. EXCAVATION & WASTE										
USR <	> Equipment Operator, G	16.00	HR	C-EQOPER4	1.00	11.78 188	0.00 0	0.00 0	11.78 188	11.78
USR <	> Laborer, Group 1	16.00	HR	C-LABORER1	1.00	7.76 124	0.00 0	0.00 0	7.76 124	7.76
MIL <	> LDR,FE,WH, 5-1/4 CY A	8.00	HR	L40CA007	1.00	0.00 0	56.09 449	0.00 0	56.09 449	56.09
MIL <	> BLADE, UNIVERSAL,HYDR	8.00	HR	T10CA013	1.00	0.00 0	5.32 43	0.00 0	5.32 43	5.32
MIL <	> DOZER,CWLR,D-7H,LGP,C	8.00	HR	T15CA014	1.00	0.00 0	60.71 486	0.00 0	60.71 486	60.71
USR <	> Truck Driver - Over 8	16.00	HR	C-TRKDVR12	1.00	9.23 148	0.00 0	0.00 0	9.23 148	9.23
MIL <	> TRK TRLR,END DUMP, 20	16.00	HR	T45XX008	1.00	0.00 0	7.29 117	0.00 0	7.29 117	7.29
MIL <	> TRK, HWY, 52,400 GVW,	16.00	HR	T50FO013	1.00	0.00 0	25.20 403	0.00 0	25.20 403	25.20

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 2

1.AA. EARTHWORK		QUANTITY	UCM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
USR <	> Foreman	8.00	HR		0.00	18.00 144	0.00 0	0.00 0	18.00 144	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	8.00	HR	T50F0003	1.00	0.00 0	6.28 50	0.00 0	6.28 50	6.28
	EXCAVATION & WASTE	600.00	CY			604	1,547	0	2,151	3.59
1.AA.03. SUBGRADE PREP										
USR <	> Equipment Operator, G	40.00	HR	C-EQOPER4	1.00	11.78 471	0.00 0	0.00 0	11.78 471	11.78
USR <	> Laborer, Group 1	20.00	HR	C-LABORER1	1.00	7.76 155	0.00 0	0.00 0	7.76 155	7.76
MIL <	> GRADER,MOTOR,CAT120-G	20.00	HR	G15CA001	1.00	0.00 0	21.97 439	0.00 0	21.97 439	21.97
USR <	> Foreman	20.00	HR		0.00	18.00 360	0.00 0	0.00 0	18.00 360	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	20.00	HR	T50F0003	1.00	0.00 0	6.28 126	0.00 0	6.28 126	6.28
MIL <	> TRK,WTR,OFF-HWY, 5000	20.00	HR	T60K1001	1.00	0.00 0	32.63 653	0.00 0	32.63 653	32.63
MIL <	> ROLLR,VIB,DD,SELF,68"	20.00	HR	R45DY003	1.00	0.00 0	34.93 699	0.00 0	34.93 699	34.93
USR <	> Truck Driver	20.00	HR	C-TRKDVR12	1.00	9.23 185	0.00 0	0.00 0	9.23 185	9.23
	SUBGRADE PREP	7200.00	SY			1,171	1,916	0	3,087	0.43
1.AA.04. BORROW (Soil Cap & Borrow)										
USR <	> Equipment Operator, G	56.00	HR	C-EQOPER4	1.00	11.78 660	0.00 0	0.00 0	11.78 660	11.78
USR <	> Laborer, Group 1	56.00	HR	C-LABORER1	1.00	7.76 435	0.00 0	0.00 0	7.76 435	7.76
USR <	> Truck Driver - Over 8	168.00	HR	C-TRKDVR12	1.00	9.23 1,551	0.00 0	0.00 0	9.23 1,551	9.23

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 3

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
MIL <	> LDR,FE,WH, 5-1/4 CY A	56.00	HR	L40CA007	1.00	0.00	56.09	0.00	56.09	56.09
						0	3,141	0	3,141	56.09
USR <	> Foreman	28.00	HR		0.00	18.00	0.00	0.00	18.00	18.00
						504	0	0	504	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	28.00	HR	T50F0003	1.00	0.00	6.28	0.00	6.28	6.28
						0	176	0	176	6.28
MIL <	> TRK TRLR,END DUMP, 20	168.00	HR	T45XX008	1.00	0.00	7.29	0.00	7.29	7.29
						0	1,225	0	1,225	7.29
MIL <	> TRK, HWY, 52,400 GVW,	168.00	HR	T50F0013	1.00	0.00	25.20	0.00	25.20	25.20
						0	4,234	0	4,234	25.20
USR <	> Borrow Material Cost	5120.00	CY		0.00	0.00	0.00	3.00	3.00	3.00
						0	0	15,360	15,360	3.00
	BORROW (Soil Cap & Bo	5210.00	CY			3,149	8,775	15,360	27,284	5.24
1.AA.05. BACKFILL										
USR <	> Equipment Operator, G	168.00	HR	C-EQOPER4	1.00	11.78	0.00	0.00	11.78	11.78
						1,979	0	0	1,979	11.78
USR <	> Laborer, Group 1	56.00	HR	C-LABORER1	1.00	7.76	0.00	0.00	7.76	7.76
						435	0	0	435	7.76
MIL <	> GRADER,MOTOR,CAT120-G	56.00	HR	G15CA001	1.00	0.00	21.97	0.00	21.97	21.97
						0	1,230	0	1,230	21.97
USR <	> Foreman	28.00	HR		0.00	18.00	0.00	0.00	18.00	18.00
						504	0	0	504	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	28.00	HR	T50F0003	1.00	0.00	6.28	0.00	6.28	6.28
						0	176	0	176	6.28
MIL <	> LNDFL COMP,CHP WH,63"	56.00	HR	R30CA004	1.00	0.00	42.01	0.00	42.01	42.01
						0	2,353	0	2,353	42.01
MIL <	> DOZER,CWLR,D-7H,LGP,C	56.00	HR	T15CA014	1.00	0.00	60.71	0.00	60.71	60.71
						0	3,400	0	3,400	60.71
MIL <	> TRK,WTR,OFF-HWY, 5000	56.00	HR	T60K1001	1.00	0.00	32.63	0.00	32.63	32.63
						0	1,827	0	1,827	32.63
MIL <	> ROLLR,VIB,DD,SELF,68"	56.00	HR	R45DY003	1.00	0.00	34.93	0.00	34.93	34.93
						0	1,956	0	1,956	34.93

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 4

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
USR <	> Base Course Material	9735.00	CY		0.00	0	0	15.00 26,025	15.00 26,025	15.00
USR <	> Crusher Fines (Beddin	870.00	CY		0.00	0	0	6.00 5,220	6.00 5,220	6.00
	BACKFILL	5210.00	CY			2,918	10,942	3,225	45,181 13,860	8.66
1.AA.06. BEDDING										
USR <	> Equipment Operator, G	8.00	HR	C-EQOPER4	1.00	11.78 94	0.00 0	0.00 0	11.78 94	11.78
USR <	> Laborer, Group 1	16.00	HR	C-LABORER1	1.00	7.76 124	0.00 0	0.00 0	7.76 124	7.76
MIL <	> GRADER, MOTOR, CAT120-G	8.00	HR	G15CA001	1.00	0.00 0	21.97 176	0.00 0	21.97 176	21.97
USR <	> Foreman	8.00	HR		0.00	18.00 144	0.00 0	0.00 0	18.00 144	18.00
MIL <	> TRK, HWY, 4X2, F250, 3/4T	8.00	HR	T50F0003	1.00	0.00 0	6.28 50	0.00 0	6.28 50	6.28
MIL <	> LNDFL COMP, CHP WH, 63"	8.00	HR	R30CA004	1.00	0.00 0	42.01 336	0.00 0	42.01 336	42.01
MIL <	> DOZER, CWLR, D-7H, LGP, C	8.00	HR	T15CA014	1.00	0.00 0	60.71 486	0.00 0	60.71 486	60.71
MIL <	> TRK, WTR, OFF-HWY, 5000	8.00	HR	T60K1001	1.00	0.00 0	32.63 261	0.00 0	32.63 261	32.63
MIL <	> ROLLER, VIB, DD, SELF, 68"	8.00	HR	R45DY003	1.00	0.00 0	34.93 279	0.00 0	34.93 279	34.93
USR <	> Crusher Fines (Beddin	870.00	CY		0.00	0	0	6.00 5,220	6.00 5,220	6.00
MIL <	> TRK TRLR, END DUMP, 20	12.00	HR	T45XX008	1.00	0.00 0	7.29 87	0.00 0	7.29 87	7.29
MIL <	> TRK, HWY, 52, 400 GVW,	12.00	HR	T50F0013	1.00	0.00 0	25.20 302	0.00 0	25.20 302	25.20
USR <	> Truck Driver - Over 8	12.00	HR	C-TRKDVR12	1.00	9.23 111	0.00 0	0.00 0	9.23 111	9.23

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 5

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
MIL <	> LDR,FE,WH, 5-1/4 CY A	12.00	HR	L40CA007	1.00	0	56.09	0.00	56.09	56.09
						673	0	0	673	
USR <	> Equipment Operator, G	12.00	HR	C-EQOPER4	1.00	11.78	0.00	0.00	11.78	11.78
						141	0	0	141	
	BEDDING	870.00	CY			615	2,651	5,220	8,486	9.75
1.AA.07. BIO BARRIER (BASE COURSE MATL)										
USR <	> Equipment Operator, G	16.00	HR	C-EQOPER4	1.00	11.78	0.00	0.00	11.78	11.78
						188	0	0	188	
USR <	> Laborer, Group 1	32.00	HR	C-LABORER1	1.00	7.76	0.00	0.00	7.76	7.76
						248	0	0	248	
MIL <	> GRADER,MOTOR,CAT120-G	16.00	HR	G15CA001	1.00	0.00	21.97	0.00	21.97	21.97
						0	352	0	352	
USR <	> Foreman	8.00	HR		0.00	18.00	0.00	0.00	18.00	18.00
						144	0	0	144	
MIL <	> TRK,HWY,4X2,F250,3/4T	8.00	HR	T50FO003	1.00	0.00	6.28	0.00	6.28	6.28
						0	50	0	50	
MIL <	> LNDFL COMP,CHP WH,63"	16.00	HR	R30CA004	1.00	0.00	42.01	0.00	42.01	42.01
						0	672	0	672	
MIL <	> DOZER,CWLR,D-7H,LGP,(	16.00	HR	T15CA014	1.00	0.00	60.71	0.00	60.71	60.71
						0	971	0	971	
MIL <	> TRK,WTR,OFF-HWY, 5000	16.00	HR	T60K1001	1.00	0.00	32.63	0.00	32.63	32.63
						0	522	0	522	
MIL <	> ROLLR,VIB,DD,SELF,68"	16.00	HR	R45DY003	1.00	0.00	34.93	0.00	34.93	34.93
						0	559	0	559	
USR <	> Base Course Material	1735.00	CY		0.00	0.00	0.00	15.00	15.00	15.00
						0	0	26,025	26,025	
	BIO BARRIER (BASE COU	1735.00	CY			581	3,126	26,025	29,732	17.14
EARTHWORK						9,187	29,247	77,850	116,284	

46,605² = 95,039²

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 6

1.AB. DEMOLITION		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AB. DEMOLITION										
USR <	> Remove barbed wire fe	815.00	LF	XLABC	75.00	0.38 308	0.02 15	0.00 0	0.40 322	0.40
USR <	> Demolition of Concret	400.00	LF	COETM	20.00	4.97 1,989	5.23 2,090	0.00 0	10.20 4,079	10.20
DEMOLITION						2,296	2,105	0	4,401	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

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DETAILED ESTIMATE

DETAIL PAGE 7

1.AC. REMOVAL & STOCKPILE CAP MATERIAL	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST

1.AC. REMOVAL & STOCKPILE CAP MATERIAL									
USR <	>	Equipment Operator, G			11.78	0.00	0.00	11.78	
		8.00 HR	C-EQOPER4	1.00	94	0	0	94	11.78
USR <	>	Laborer, Group 1			7.76	0.00	0.00	7.76	
		16.00 HR	C-LABORER1	1.00	124	0	0	124	7.76
MIL <	>	LDR,FE,WH, 5-1/4 CY A			0.00	56.09	0.00	56.09	
		8.00 HR	L40CA007	1.00	0	449	0	449	56.09
MIL <	>	BLADE, UNIVERSAL, HYDR			0.00	5.32	0.00	5.32	
		8.00 HR	T10CA013	1.00	0	43	0	43	5.32
MIL <	>	DOZER,CWLR,D-7H,LGP,C			0.00	60.71	0.00	60.71	
		8.00 HR	T15CA014	1.00	0	486	0	486	60.71
		REMOVAL & STOCKPILE C	755.00 CY		218	977	0	1,195	1.58

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 8

1.AD. NEW FENCING	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AD. NEW FENCING									
MIL <02712 4301 > Standard 4 Strand Fen	1800.00	LF	ULABL	25.00	1.22 2,195	0.50 909	1.10 1,980	2.82 5,084	2.82
MIL <02711 4052 > Double 16' Wide X 4'	1.00	EA	XLABD	0.20	141.55 142	35.52 36	250.00 250	427.08 427	427.08
NEW FENCING					2,337	944	2,230	5,511	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 9

1.AE. TESTING		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AE. TESTING										
USR <	> Soil Testing - Dbl Ri	1.00	EA		0.00	0	0	15,000	15,000	15000.00
USR <	> Soil Testing - Moistu	1.00	EA		0.00	0	0	3,500	3,500	3500.00
USR <	> Air Monitoring	1.00	EA		0.00	0	0	5,000	5,000	5000.00
	TESTING					0	0	23,500	23,500	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 08:49:36

DETAILED ESTIMATE

DETAIL PAGE 10

1.AF. TEST PAD, COMPLETE	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AF. TEST PAD, COMPLETE									
TEST PAD, COMPLETE					0	0	4,000	4,000	
CELL NO. 3, LANDFILL					14,039	33,273	107,580	154,892	
CELL NO. 3, LANDFILL					14,039	33,273	107,580	154,892	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS

TIME 13:06:13

TITLE PAGE 1

OPTION #2

30% DESIGN

CELL NO. 3, LANDFILL #5
CANNON AFB, NM

Designed By: ALBQ DIST
Estimated By: ALBQ DIST

Prepared By:

Date: 03/12/92

MCACES GOLD EDITION
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Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS

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Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** PROJECT OWNER SUMMARY - LEVEL 2 **

TIME 13:06:13

SUMMARY PAGE 1

	QUANTITY	UOM	CONTRACT	CONTING	S&A	TOTAL COST	UNIT

1 CELL NO. 3, LANDFILL #5							
1.AA EARTHWORK			160,439	40,110	0	200,548	
1.AB DEMOLITION			6,120	1,530	0	7,650	
1.AD NEW FENCING			7,663	1,916	0	9,579	
1.AE TESTING			10,428	2,607	0	13,036	
			-----	-----	-----	-----	
CELL NO. 3, LANDFILL #5			184,650	46,163	0	230,813	
			-----	-----	-----	-----	
CELL NO. 3, LANDFILL #5			184,650	46,163	0	230,813	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** PROJECT INDIRECT SUMMARY - LEVEL 2 **

TIME 13:06:13

SUMMARY PAGE 2

	QUANTY UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT

1	CELL NO. 3, LANDFIL								
1.AA	EARTHWORK	115,385	13,846	6,462	13,569	2,985	8,191	160,439	
1.AB	DEMOLITION	4,401	528	246	518	114	312	6,120	
1.AD	NEW FENCING	5,511	661	309	648	143	391	7,663	
1.AE	TESTING	7,500	900	420	882	194	532	10,428	

	CELL NO. 3, LAND	132,798	15,936	7,437	15,617	3,436	9,427	184,650	

	CELL NO. 3, LAND	132,798	15,936	7,437	15,617	3,436	9,427	184,650	
	Contingency @ 25%							46,163	

	TOTAL INCL OWNER COSTS							230,813	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 ** PROJECT DIRECT SUMMARY - LEVEL 2 **

TIME 13:06:13

SUMMARY PAGE 3

		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST

1	CELL NO. 3, LANDFILL #5									
1.AA	EARTHWORK	14,356				18,968		82,062	115,385	
1.AB	DEMOLITION	2,296				2,105		0	4,401	
1.AD	NEW FENCING	2,337				944		2,230	5,511	
1.AE	TESTING	0				0		7,500	7,500	

	CELL NO. 3, LANDFILL #5	18,989				22,017		91,792	132,798	

	CELL NO. 3, LANDFILL #5	18,989				22,017		91,792	132,798	
	Field Overhead								15,936	

	SUBTOTAL								148,734	
	Home Office								7,437	

	SUBTOTAL								156,170	
	Profit								15,617	

	SUBTOTAL								171,787	
	Bond								3,436	

	SUBTOTAL								175,223	
	NM Gross Receipts Tax @ 5.375%								9,427	

	TOTAL INCL INDIRECTS								184,650	
	Contingency @ 25%								46,163	

	TOTAL INCL OWNER COSTS								230,813	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR DIRECT SUMMARY **

TIME 13:06:13

SUMMARY PAGE 4

		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
AA	PRIME CONTRACTOR					18,989	22,017	91,792	132,798	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR DIRECT SUMMARY - LEVEL 2 **

TIME 13:06:13

SUMMARY PAGE 5

		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AA.	EARTHWORK									
	AA			PRIME CONTRACTOR		14,356	18,968	82,062	115,385	
1.AB.	DEMOLITION									
	AA			PRIME CONTRACTOR		2,296	2,105		4,401	
1.AD.	NEW FENCING									
	AA			PRIME CONTRACTOR		2,337	944	2,230	5,511	
1.AE.	TESTING									
	AA			PRIME CONTRACTOR				7,500	7,500	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR INDIRECT SUMMARY **

TIME 13:06:13

SUMMARY PAGE 6

		QUANTY UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT
AA	PRIME CONTRACTO		132,798	15,936	7,437	15,617	3,436	9,427	184,650	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
** CONTRACTOR INDIRECT SUMMARY - LEVEL 2 **

TIME 13:06:13

SUMMARY PAGE 7

QUANTY	UOM	DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	NMGRT	TOTAL COST	UNIT
1.AA.	EARTHWORK								
AA	PRIME CONTRACTO	115,385	13,846	6,462	13,569	2,985	8,191	160,439	
1.AB.	DEMOLITION								
AA	PRIME CONTRACTO	4,401	528	246	518	114	312	6,120	
1.AD.	NEW FENCING								
AA	PRIME CONTRACTO	5,511	661	309	648	143	391	7,663	
1.AE.	TESTING								
AA	PRIME CONTRACTO	7,500	900	420	882	194	532	10,428	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS

TIME 13:06:13

SETTINGS PAGE 1

** CONTRACTOR SETTINGS **

AMOUNT PCT PCT S RISK DIFF SIZE PERIOD INVEST ASSIST SUBCON

AA PRIME CONTRACTOR

Field Oyerhead	P		12.00							
Home Office	P		5.00							
Profit	P		10.00							
Bond	P		2.00							
NM Gross Receipts Tax @ 5.375%	P		5.38							

Fri 13 Mar 1992

U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
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 1. CELL NO. 3, LANDFILL #5

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DETAILED ESTIMATE

DETAIL PAGE 1

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1. CELL NO. 3, LANDFILL #5										
1.AA. EARTHWORK										
1.AA.01. CLEAR AND GRUB										
USR <	> Equipment Operator, G	4.00	HR	C-EQOPER4	1.00	11.78 47	0.00 0	0.00 0	11.78 47	11.78
USR <	> Laborer, Group 1	4.00	HR	C-LABORER1	1.00	7.76 31	0.00 0	0.00 0	7.76 31	7.76
MIL <	> DOZER,CWLR,D-7H,LGP,(	4.00	HR	T15CA014	1.00	0.00 0	60.71 243	0.00 0	60.71 243	60.71
MIL <	> BLADE, UNIVERSAL,HYDR	4.00	HR	T10CA013	1.00	0.00 0	5.32 21	0.00 0	5.32 21	5.32
USR <	> Foreman	4.00	HR		0.00	18.00 72	0.00 0	0.00 0	18.00 72	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	4.00	HR	T50FO003	1.00	0.00 0	6.28 25	0.00 0	6.28 25	6.28
	CLEAR AND GRUB	7200.00	SY			150	289	0	439	0.06
1.AA.02. EXCAVATION & WASTE										
USR <	> Equipment Operator, G	12.00	HR	C-EQOPER4	1.00	11.78 141	0.00 0	0.00 0	11.78 141	11.78
USR <	> Laborer, Group 1	12.00	HR	C-LABORER1	1.00	7.76 93	0.00 0	0.00 0	7.76 93	7.76
MIL <	> LDR,FE,WH, 5-1/4 CY A	6.00	HR	L40CA007	1.00	0.00 0	56.09 337	0.00 0	56.09 337	56.09
MIL <	> BLADE, UNIVERSAL,HYDR	6.00	HR	T10CA013	1.00	0.00 0	5.32 32	0.00 0	5.32 32	5.32
MIL <	> DOZER,CWLR,D-7H,LGP,(	6.00	HR	T15CA014	1.00	0.00 0	60.71 364	0.00 0	60.71 364	60.71
USR <	> Truck Driver - Over 8	12.00	HR	C-TRKDVR12	1.00	9.23 111	0.00 0	0.00 0	9.23 111	9.23
MIL <	> TRK TRLR,END DUMP, 20	12.00	HR	T45XX008	1.00	0.00 0	7.29 87	0.00 0	7.29 87	7.29
MIL <	> TRK, HWY, 52,400 GVW,	12.00	HR	T50FO013	1.00	0.00 0	25.20 302	0.00 0	25.20 302	25.20

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U. S. Army Corps of Engineers
 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
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 1. CELL NO. 3, LANDFILL #5

TIME 13:06:13

DETAILED ESTIMATE

DETAIL PAGE 2

1.AA. EARTHWORK		QUANTITY UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
USR <	> Foreman	6.00 HR		0.00	18.00 108	0.00 0	0.00 0	18.00 108	18.00
MIL <	> TRK, HWY, 4X2, F250, 3/4T	6.00 HR	T50F0003	1.00	0.00 0	6.28 38	0.00 0	6.28 38	6.28
	EXCAVATION & WASTE	600.00 CY			453	1,160	0	1,614	2.69
1.AA.03. SUBGRADE PREP									
USR <	> Equipment Operator, G	40.00 HR	C-EQOPER4	1.00	11.78 471	0.00 0	0.00 0	11.78 471	11.78
USR <	> Laborer, Group 1	20.00 HR	C-LABORER1	1.00	7.76 155	0.00 0	0.00 0	7.76 155	7.76
MIL <	> GRADER, MOTOR, CAT120-G	20.00 HR	G15CA001	1.00	0.00 0	21.97 439	0.00 0	21.97 439	21.97
USR <	> Foreman	20.00 HR		0.00	18.00 360	0.00 0	0.00 0	18.00 360	18.00
MIL <	> TRK, HWY, 4X2, F250, 3/4T	20.00 HR	T50F0003	1.00	0.00 0	6.28 126	0.00 0	6.28 126	6.28
MIL <	> TRK, WTR, OFF-HWY, 5000	20.00 HR	T60K1001	1.00	0.00 0	32.63 653	0.00 0	32.63 653	32.63
MIL <	> ROLLR, VIB, DD, SELF, 68"	20.00 HR	R45DY003	1.00	0.00 0	34.93 699	0.00 0	34.93 699	34.93
USR <	> Truck Driver	20.00 HR	C-TRKDVR12	1.00	9.23 185	0.00 0	0.00 0	9.23 185	9.23
	SUBGRADE PREP	7200.00 SY			1,171	1,916	0	3,087	0.43
1.AA.04. BORROW (Random Fill)									
USR <	> Equipment Operator, G	40.00 HR	C-EQOPER4	1.00	11.78 471	0.00 0	0.00 0	11.78 471	11.78
USR <	> Laborer, Group 1	40.00 HR	C-LABORER1	1.00	7.76 310	0.00 0	0.00 0	7.76 310	7.76
USR <	> Truck Driver - Over 8	120.00 HR	C-TRKDVR12	1.00	9.23 1,108	0.00 0	0.00 0	9.23 1,108	9.23

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 PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
 FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
 1. CELL NO. 3, LANDFILL #5

TIME 13:06:13

DETAILED ESTIMATE

DETAIL PAGE 3

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
MIL <	> LDR,FE,WH, 5-1/4 CY A	40.00	HR	L40CA007	1.00	0.00	56.09	0.00	56.09	
						0	2,244	0	2,244	56.09
USR <	> Foreman	20.00	HR		0.00	18.00	0.00	0.00	18.00	
						360	0	0	360	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	20.00	HR	T50FO003	1.00	0.00	6.28	0.00	6.28	
						0	126	0	126	6.28
MIL <	> TRK TRLR,END DUMP, 20	120.00	HR	T45XX008	1.00	0.00	7.29	0.00	7.29	
						0	875	0	875	7.29
MIL <	> TRK, HWY, 52,400 GVW,	120.00	HR	T50FO013	1.00	0.00	25.20	0.00	25.20	
						0	3,024	0	3,024	25.20
USR <	> Borrow Material Cost	3475.00	CY		0.00	0.00	0.00	3.00	3.00	
						0	0	10,425	10,425	3.00
	BORROW (Random Fill)	3475.00	CY			2,249	6,268	10,425	18,942	5.45
1.AA.05. BACKFILL										
USR <	> Equipment Operator, G	120.00	HR	C-EQOPER4	1.00	11.78	0.00	0.00	11.78	
						1,414	0	0	1,414	11.78
USR <	> Laborer, Group 1	40.00	HR	C-LABORER1	1.00	7.76	0.00	0.00	7.76	
						310	0	0	310	7.76
MIL <	> GRADER,MOTOR,CAT120-G	40.00	HR	G15CA001	1.00	0.00	21.97	0.00	21.97	
						0	879	0	879	21.97
USR <	> Foreman	20.00	HR		0.00	18.00	0.00	0.00	18.00	
						360	0	0	360	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	20.00	HR	T50FO003	1.00	0.00	6.28	0.00	6.28	
						0	126	0	126	6.28
MIL <	> LNDFL COMP,CHP WH,63"	40.00	HR	R30CA004	1.00	0.00	42.01	0.00	42.01	
						0	1,680	0	1,680	42.01
MIL <	> DOZER,CWLR,D-7H,LGP,C	40.00	HR	T15CA014	1.00	0.00	60.71	0.00	60.71	
						0	2,428	0	2,428	60.71
MIL <	> TRK,WTR,OFF-HWY, 5000	40.00	HR	T60K1001	1.00	0.00	32.63	0.00	32.63	
						0	1,305	0	1,305	32.63
MIL <	> ROLLR,VIB,DD,SELF,68"	40.00	HR	R45DY003	1.00	0.00	34.93	0.00	34.93	
						0	1,397	0	1,397	34.93

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U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
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1. CELL NO. 3, LANDFILL #5

TIME 13:06:13

DETAILED ESTIMATE

DETAIL PAGE 4

1.AA. EARTHWORK		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
BACKFILL		3475.00	CY			2,084	7,816	0	9,900	2.85
1.AA.06. BEDDING										
USR <	> Equipment Operator, G	8.00	HR	C-EQOPER4	1.00	11.78 94	0.00 0	0.00 0	11.78 94	11.78
USR <	> Laborer, Group 1	16.00	HR	C-LABORER1	1.00	7.76 124	0.00 0	0.00 0	7.76 124	7.76
MIL <	> GRADER,MOTOR,CAT120-G	8.00	HR	G15CA001	1.00	0.00 0	21.97 176	0.00 0	21.97 176	21.97
USR <	> Foreman	8.00	HR		0.00	18.00 144	0.00 0	0.00 0	18.00 144	18.00
MIL <	> TRK,HWY,4X2,F250,3/4T	8.00	HR	T50FO003	1.00	0.00 0	6.28 50	0.00 0	6.28 50	6.28
USR <	> Sand Bedding Material	1740.00	CY		0.00	0.00 0	0.00 0	4.00 6,960	4.00 6,960	4.00
MIL <	> TRK TRLR,END DUMP, 20	16.00	HR	T45XX008	1.00	0.00 0	7.29 117	0.00 0	7.29 117	7.29
MIL <	> TRK, HWY, 52,400 GVW,	16.00	HR	T50FO013	1.00	0.00 0	25.20 403	0.00 0	25.20 403	25.20
USR <	> Truck Driver - Over 8	16.00	HR	C-TRKDVR12	1.00	9.23 148	0.00 0	0.00 0	9.23 148	9.23
BEDDING		870.00	CY			510	746	6,960	8,216	9.44
1.AA.07. GEO COMPOST & FILTER FABRIC										
USR <	> Geo Compost	46865.00	SF	XLABD	500.00	0.06 2,654	0.01 666	1.30 60,925	1.37 64,244	1.37
MIL <02512 2001 >	Filter Fabric	469.00	CSF	ULABF	2.81	10.84 5,085	0.23 107	8.00 3,752	19.07 8,943	19.07
GEO COMPOST & FILTER		46865.00	SF			7,738	773	64,677	73,187	1.56
EARTHWORK						14,356	18,968	82,062	115,385	

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U. S. Army Corps of Engineers
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1. CELL NO. 3, LANDFILL #5

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DETAILED ESTIMATE

DETAIL PAGE 5

1.AB. DEMOLITION		QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
1.AB. DEMOLITION										
USR <	> Remove barbed wire fe	815.00	LF	XLABC	75.00	0.38 308	0.02 15	0.00 0	0.40 322	0.40
USR <	> Demolition of Concret	400.00	LF	COETM	20.00	4.97 1,989	5.23 2,090	0.00 0	10.20 4,079	10.20
DEMOLITION						2,296	2,105	0	4,401	

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 13:06:13

DETAILED ESTIMATE

DETAIL PAGE 6

1.AD. NEW FENCING	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST	

1.AD. NEW FENCING										
MIL <02712 4301 > Standard 4 Strand Fen					1.22	0.50	1.10	2.82		
	1800.00	LF	ULABL	25.00	2,195	909	1,980	5,084	2.82	
MIL <02711 4052 > Double 16' Wide X 4'					141.55	35.52	250.00	427.08		
	1.00	EA	XLABD	0.20	142	36	250	427	427.08	

NEW FENCING					2,337	944	2,230	5,511		

Fri 13 Mar 1992

U. S. Army Corps of Engineers
PROJECT CELL-3: CELL NO. 3, LANDFILL #5 - CANNON AFB, NM
FOR OFFICIAL USE ONLY UNTIL AFTER NEGOTIATIONS
1. CELL NO. 3, LANDFILL #5

TIME 13:06:13

DETAILED ESTIMATE

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1.AE. TESTING	QUANTITY	UOM	CREW ID	OUTPUT	LABOR	EQUIPMNT	MATERIAL	TOTAL COST	UNIT COST
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1.AE. TESTING

USR <	> Air Monitoring				0.00	0.00	7500.00	7500.00	
		1.00	EA	0.00	0	0	7,500	7,500	7500.00
	TESTING				0	0	7,500	7,500	
	CELL NO. 3, LANDFILL				18,989	22,017	91,792	132,798	
	CELL NO. 3, LANDFILL				18,989	22,017	91,792	132,798	