



Department of Energy
Albuquerque Field Office
P.O. Box 5400
Albuquerque, New Mexico 87185-5400

MAR 02 1994

Mr. Joseph J. Holonich, Acting Chief
Uranium Recovery Branch
Division of Low-Level Waste
Management and Decommissioning
Office of Nuclear materials Safety
and Safeguards
Mail Stop 5E-4 OWFN
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Holonich:

Enclosed for your information is one copy each of Project Interface Document (PID) Numbers 06-S-21, Revision 4, and 06-S-029, Revision 1. These PIDs are Class II changes. PID 06-S-21, Revision 4, provides for construction of a new wastewater retention basin at the New Rifle processing site and PID 06-S-029, Revision 1, eliminates the slurry wall at the New Rifle processing site.

Elimination of the slurry wall will cause an increase in the amount of wastewater generated during subpile excavation. The new retention basin is required in order to handle the additional wastewater. As outlined in the wastewater management plan, this wastewater will be used for dust control in contaminated areas. This modification results in a cost avoidance to the Rifle Uranium Mill Tailings Remedial Action (UMTRA) Project of approximately \$325,000.

Should you have any questions please contact me at (505) 845-5668.

Sincerely,

Sharon J. Arp
Site Manager
Uranium Mill Tailings Remedial Action
Project Office

2 Enclosures

cc:
See page 2

Rebate: LA/NMSS/LLUR

9403140399 940302
NMSS SUBJ PDR
WM-62

*NL04 1/1
WM-62*

Mr. Joseph J. Holonich

2

MAR 02 1994

cc w/enclosures:
A. Mullins, NRC

cc w/o enclosures:
D. Rom, NRC
C. Smythe, UMTRA
D. Bierley, TAC
S. Cox, TAC
N. Abramiuk, MK-F



PROJECT INTERFACE DOCUMENT (PID)

Site Rifle	Date 18 January 1994	PID No. 06-S-29, Rev. 1	Site No. 06	Vic. Prop. No.
Originator and Location G.G. Cherrington, SF, CA	Phone 415/442-7690	Organization MKS	Answer By:	References: Subcontract: Subcontract No:
Subject Elimination of Slurry Wall at New Rifle Processing Site				

Description of Problem and Recommended Solution

Clarification

Change

PROBLEM:

PID 06-S-21, Rev. 4 provides for construction of an additional 14 acre-ft retention basin (Retention Basin No. 3) at New Rifle processing site. The purpose of Wastewater Retention Basin No. 3 is primarily to provide storage for the subpile water so that it can be used for dust control, thus eliminating the need for a wastewater treatment plant at New Rifle. However, Wastewater Retention Basin No. 3 is designed with sufficient capacity to also accommodate additional groundwater inflow during excavation and thus eliminate the need for a slurry wall cut-off at New Rifle. Elimination of the slurry wall at New Rifle site will result in additional cost-savings to the project.

[Continued on the following sheet]

Originator

G.G. Cherrington
Signature

1/18/94
Date

Disposition Approved Disapproved Approved as Noted

RAC Site Manager

Richard Alvarado
Signature

Criteria Change? Yes No
(If Yes, DOE approval required)

RAC Project Control

William W. Johnson 2/2/94
Signature Date

CONTROLLED
WORK COPY

RAC Engineering/Design

Richard Alvarado
Signature

RAC Construction Engineer

Richard Alvarado 2/2/94
Signature Date

Review for Quality Requirements

Thomas P. Martz 02/02/94
Signature Date

Class 1

Maurice J. Coy 2/1/94
DOE Site Manager Approval Date

Distribution	Name	Location	Name	Location	Cost/Time Est.
RAC Site Mgr.	<i>R. W. Hee</i>		RAC Const. Engr. Mgr.	<i>C. Spencer</i>	<input type="checkbox"/> Attached <input type="checkbox"/> Not Required <input type="checkbox"/> DOE Approval Req.
DOE Proj. Engr.	<i>J. Hop</i>		RAC Qual. Mgr.	<i>J. Martz</i>	
TAC Site Mgr.	<i>J. Cox</i>		Other	<i>D. Sanders</i>	
RAC Site Qual. Engr.	<i>J. Wille</i>			<i>B. Johnson</i>	
RAC HS&E Mgr.	<i>J. Coffey</i>			<i>D. Blazdel</i>	

SOLUTION:

F:\UMTRA\RFL\PID629R1.RFL
Sheet 2 of 2

Elimination of the Slurry Wall at the New Rifle site results in the following revisions to the Subcontract Documents:

1. Delete Drawing No. RFL-PS-10-0739, New Rifle Processing Site, Slurry Trench Plan, Profile, Sections and Details.
2. Specification Section 01010, Summary of Work, Article 1.2.B.9 - Revise the paragraph heading of Paragraph 9 to read:
"9. Dewatering and Drainage Facilities, Including a Slurry Trench at Old Rifle:"
3. Specification Section 01010, Summary of Work, Article 1.4.C.13 - Revise Paragraph 13 to read:
"13. Install dewatering and drainage facilities as needed at the two processing sites. Install slurry trench at Old Rifle."
4. Specification Section 02168, Slurry Trench, Article 1.1 - Revise the first sentence of Article 1.1 to read:
"This Specification Section covers the requirements for construction of a cut-off wall at the Old Rifle processing site by the slurry trench method as specified herein and as indicated on the Subcontract Drawings".
5. Specification Section 02168, Slurry Trench, Article 2.3 - Revise the first sentence of Article 2.3 to read:
"Drainage window material shall be installed in the slurry wall at Old Rifle processing site and shall be well graded uncontaminated materials conforming to the following gradation limits:
6. Specification Section 02168, Slurry Trench, Article 3.1.A.1 - Delete the heading of Paragraph 1 in its entirety.



MORRISON KNUDSEN CORPORATION
ENVIRONMENTAL SERVICES DIVISION

UMTRA PROJECT

F:\UMTRA\RFL\PID621R4.RFL
Sheet 1 of 2

PROJECT INTERFACE DOCUMENT (PID)

Site Rifle	Date 18 January 1994	PID No. 06-S-21, Rev. 4	Site No. 06	Vic. Prop. No.
Originator and Location G.G. Cherrington, SF, CA	Phone 415/442-7690	Organization MKES	Answer By:	References: Subcontract: Subcontract No:
Subject Revision of Subcontract Dwg. No. RFL-PS-10-0710 for Construction of an additional Wastewater Retention Basin at New Rifle Processing Site				

Description of Problem and Recommended Solution
 Clarification Change

PROBLEM:

The subpile water at New Rifle contains heavy metals, including radionuclides, and relatively high levels of ammonia and total dissolved solids (TDS). Treatment and discharge of this water would be very expensive, particularly the treatment required to meet the ammonia limits and the Whole Effluent Toxicity (WET) test requirement of the CDPS permit.

[Continued on the following sheet]

Originator G.G. Cherrington 1/18/94
Signature Date

Disposition	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	<input checked="" type="checkbox"/> Approved as Noted	RAC Site Manager	<u>J. Wille</u>	<u>2/18/94</u>
Criteria Change? (If Yes, DOE approval required)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<i>Cost estimate for 342,129 is deleted (and supporting data) and replaced with cost estimate for 209,414 (see attached) W.D.</i>			
Class II	<i>This PID has DOE approval w/ the exception as stated on page 2/2.</i>					
Site Manager Approval	<u>Sharon J. Coy</u>	Date	<u>2/17/94</u>	RAC Project Control	<u>FB Salute</u>	<u>3/18/94</u>
				RAC Engineering/Design	<u>C. Spencer</u>	<u>2/18/94</u>
				RAC Construction Engineer	<u>Gail K. Spencer</u>	<u>2/18/94</u>
				Review for Quality Requirements	<u>Steve D. Marts</u>	<u>02/18/94</u>
					Signature	Date

Distribution	Name	Location	Name	Location	Cost/Time Est.
RAC Site Mgr.	<u>F. Wilhee</u>		RAC Const. Engr. Mgr.	<u>C. Spencer</u>	<input checked="" type="checkbox"/> Attached <input type="checkbox"/> Not Required <input type="checkbox"/> DOE Approval Req.
DOE Proj. Engr.	<u>J. Nop</u>		RAC Qual. Mgr.	<u>J. Marts</u>	
TAC Site Mgr.	<u>J. Cox</u>		Other:	<u>D. Sanders</u>	
RAC Site Qual. Engr.	<u>J. Wille</u>			<u>B. Johnson</u>	
RAC HS&E Mgr.	<u>J. Coffman</u>			<u>D. Blasdel</u>	

SOLUTION:

F:\UMTRA\RFL\PID621R4.RFL
Sheet 2 of 2

Following evaluation of various alternatives, it has been determined that the most economical solution would be to use the subpile water for dust control in the contaminated areas of the New Rifle processing site. The existing wastewater retention basins at the New Rifle processing site will be used to contain surface runoff from contaminated areas. However, to provide storage capacity for the subpile water and use this water for dust control, an additional 14 acre-ft retention basin (Retention Basin No. 3) will be constructed at the New Rifle site. This retention basin will act as an equalization basin to accumulate subpile water when the subpile dewatering rate exceeds the dust control application rate, and to supply from storage the dust control water requirement when the dust control application rate exceeds the subpile dewatering rate.

Provision of Wastewater Retention Basin No. 3 will eliminate the need for a wastewater treatment plant and off-site discharges at the New Rifle processing site. Provision of Wastewater Retention Basin No. 3 will also eliminate the need for the slurry trench at the New Rifle site as Retention Basin No. 3 will be of sufficient capacity to accommodate the additional groundwater inflow during excavation. Elimination of the slurry trench at New Rifle and eliminating the need for a wastewater treatment plant will offset the cost of constructing Wastewater Retention Basin No. 3 and will result in a net cost savings to the project.

The materials to be used for construction of Wastewater Retention Basin No. 3 are as follows:

- (i) Imported uncontaminated fill material as specified in Specification Section 02200, Article 2.1 A.6.
- (ii) Membrane liner as specified in Specification Section 02771. Installation of the liner shall be in accordance with Specification Section 02771, Part 3 - Execution.

When Wastewater Retention Basin No. 3 is no longer needed, as determined by the Contractor, the membrane liner shall be removed and disposed of per Specifications Section 02771, Part 3, Article 3.10. The uncontaminated fill material shall be used for backfilling and final grading of the site, as approved by the Contractor.

The proposed plan, typical cross-section and construction details of the Wastewater Retention Basin No. 3 are shown on the attached Subcontract Drawing No. RFL-PS-10-0710, Rev. 2. A cost estimate is also attached. A separate PID will be written to implement deletion of the slurry trench at the New Rifle site.

The DOE provides technical approval of this PID. The DOE does not approve the \$342,129 cost estimate. Per our letter to MK-F dated Nov 29, 1993, the DOE has approved the expenditure of \$30,000 for construction of a new retention basin. Should MK-F require additional funds for the construction of the retention basin, MK-F must acquire approval ~~from~~ from the DOE prior to incurring such cost.

A

06/10/93
11:20am

MC ENVIRONMENTAL SERVICES DIVISION
STANDARD COST ESTIMATE SUMMARY
ESTIMATE SUMMARY 2 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE ITEM
Subtotals for: ALTERNATIVE
(Indirect costs totaling \$ 46,061 have been burdened over direct costs totaling \$ 406,232)

Project: ULTRA RIFLE POND
Number: 3855-70-5913

Est. By: BS
Run No.: 2

EF.	OPERATION	QUANTITY	HOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	SUB-CONTRACTS	TOTAL DIRECT COST	INDIRECT COST BURDEN	RID AMOUNT
201	MOBILIZATION & WORKER TIME	1.00 LS	1,416	30,440	5,600	2,200	2,200	24,800	64,040	7,261	71,301
202	BOND PREMIUM	1.00 LS						2,200	2,200	249	2,449
203	CREDIT FOR EMB NOT PLACED	-62,666.00						2,280	2,280		2,280
								-142,878	-142,878		-142,878
204	POND EMBARKMENT	62,666.00	0.054	73,428	0.200	0.779	0.185		2,365	0.248	2,613
			3,386		12,543	48,653	11,600		148,223	16,884	165,107
205	FURNISH & INSTALL LINER	16,390.00	0.109	1,808	1.580	0.104	1.120		5,019	0.569	5,588
			1,790	29,626	32,448	1,698	18,494		82,266	9,328	91,594
206	REMOVE POND & END JOB	62,666.00	0.043	0.913	0.700	0.134	0.134		1,747	0.198	1,945
			2,659	57,244	43,843	8,416	8,416		109,503	12,416	121,919
291	CONTRACTOR'S FIELD O'NEAR	1.00 LS		14,732	1,700	1,500			17,932	-17,932	0
292	CONTRACTOR'S PROFIT	1.00 LB						28,129	28,129	-28,129	0
	Subtotals, ALTERNATIVE 2:		9,291	287,670	44,985	102,496	42,210	-87,749	309,615	-1	309,614
	GRAND TOTALS:		9,291	287,670	44,985	102,496	42,210	-87,749	309,615	-1	309,614

Expenditure of roughly \$ 310,000
Approved J. Melbae Olsam 2/23/94

09/13/93
2:23pm

Project: UMPIA RIFLE FORD
Number: 3865-70-3913

Mortizian Excavators Corporation
Standard Cost Estimate Summary
ESTIMATE SUMMARY, ALTERNATIVE 2 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE ITEM
Subtotals for: ALTERNATIVE

(Indirect costs totaling \$ 46,061 have been burdeshed over direct costs totaling \$ 438,945)

Page: 1

Est. By: TD
Rev. No. 1 2

REF.	OPERATION	QUANTITY	MANHOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	CONTRACTS	SUB-	TOTAL DIRECT COST	INDIRECT COST	TOTAL COST	AMOUNT
201	MEBILIZATION & WORKER TRG	1.00 LS	1,414	30,440	6,600	2,200	24,800	6,720	70,760				
202	BCRD PREMIUM	1.00 LS								2,200	231	2,431	
203	CREDIT FOR EMB NOT PLACED	-62,666.00 CY								2,280	-142,878	-140,598	
204	POND ENHANCEMENT	62,666.00 CY	9,054	79,428	0,779	0,708	0,705			11,400	15,534	26,934	
205	FURNISH & INSTALL LINER	16,390.00 SY	0,109	1,808	0,104	1,128	1,128			3,019	0,527	3,546	
206	REMOVE POND & END JOB	62,666.00 CY	1,700	29,828	1,698	18,494	18,494			82,286	8,633	90,919	
206	REMOVE POND & END JOB	62,666.00 CY	0,061	1,254	0,804	0,162	0,162			2,280	0,237	2,517	
206	REMOVE POND & END JOB	62,666.00 CY	3,830	78,581	57,632	11,179	11,179			141,612	14,060	155,672	
206	ADDITIONAL LINER MAINTNE	1.00 LS	37	555	21	29	29			603	63	666	
291	CONTRACTORS FIELD O'HEAD	1.00 LS		16,732	1,700	1,900	1,900			17,932	-17,932	0	
292	CONTRACTORS PROFIT	1.00 LS								28,129	-28,129	0	
Subtotals, ALTERNATIVE 2:													
			10,459	229,362	44,988	110,326	45,202	-87,769		342,129		342,129	
GRAND TOTALS:			10,459	229,362	44,988	110,326	45,202	-87,769		342,129		342,129	

Delete this estimate.
Includes Alternatives 2/23/94

3885-RFL-0-01-05090-00

UMTRA 3885-70

**Revised Cost Estimate
of 09/13/93
for Additional
Retention Basins
at New Rifle**

Delete

TABLE 1. RETENTION BASIN CAPACITY VS. COST
AT NEW RIFLE (SEE ATTACHMENT 1 FOR DETAILED COST ESTIMATE)

RETENTION BASIN CAPACITY (AC-FT)	TOTAL CONSTR. COST INCL MOBILIZATION, & REMOVAL OF BASIN AT END OF JOB
8.6	\$245,145
14	\$342,129
29	\$538,815
42	\$735,835

Delete

TABLE 2. COSTS OF THE DEWATERING RETENTION BASIN AT NEW RIFLE WITH AND WITHOUT A SLURRY WALL

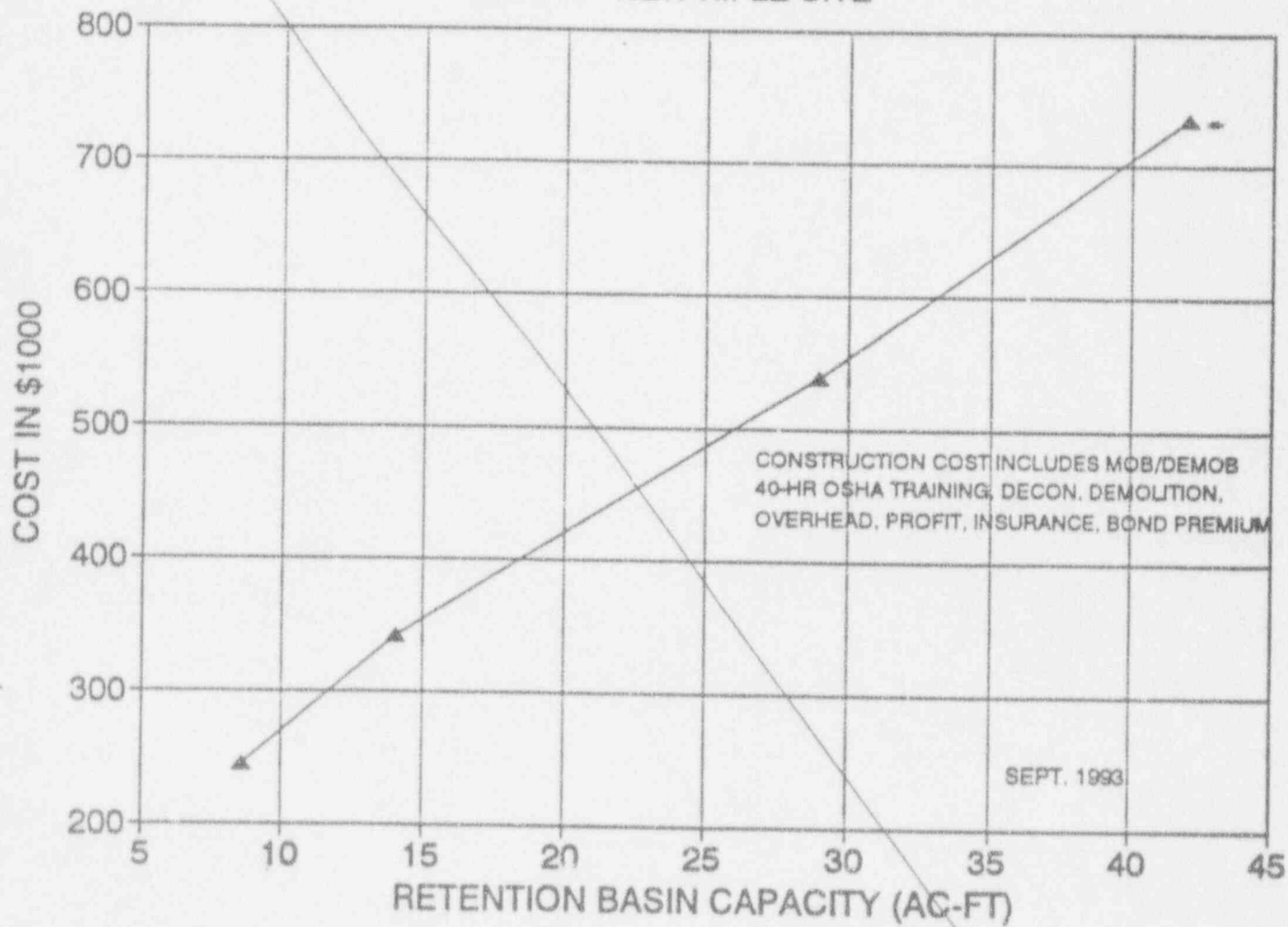
ALTERNATIVE	SLURRY WALL CONSTRUCTED AT NEW RIFLE?	COBBLES TO FINES RATIO	SUBPILE EXCAVATION DEPTH (FT) (REF. 2)	RETENTION BASIN CAPACITY (ACRE-FT) (REF. 3)	RETENTION BASIN COST (SEE TABLE 1)	SLURRY WALL COST (ATTACHMENT 2)	TOTAL COST	NET COST SAVINGS
1	YES	70:30	8.3	8.6	\$245,145	\$325,367	\$570,512	\$96,984
2	YES	NONE(0:100)	8.6	14	\$342,129	\$325,367	\$667,496	\$0
3	NO	NONE(0:100)	8.6	29	\$538,815	\$0	\$538,815	\$128,681
4	NO	70:30	8.3	14	\$342,129	\$0	\$342,129	\$325,367

TABLE 3. COSTS OF THE DEWATERING RETENTION BASIN AT NEW RIFLE FOR
A LOWER THAN ESTIMATED COBBLES-TO-FINES RATIO

ALTERNATIVE	SLURRY WALL CONSTRUCTED AT NEW RIFLE?	COBBLES TO FINES RATIO	SUBPILE EXCAVATION DEPTH (FT) (REF. 2)	RETENTION BASIN CAPACITY (ACRE-FT) (REF. 3)	RETENTION BASIN COST (FIGURE 1)	SLURRY WALL COST	TOTAL COST	NET COST SAVINGS
5	NO	80:40	7.3	20	\$420,000	\$0	\$420,000	\$247,496

UMTRA - NEW RIFLE SITE

FIGURE 1



Delete

09/13/93
2:21pm

Project: UMTRA RIFLE POND
Number: 3885-70-5913

Morrison Knudsen Corporation
Standard Cost Estimate Summary
ESTIMATE SUMMARY, ALTERNATIVE 1 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE, ITEM
Subtotals for: ALTERNATIVE

Est. By: TD
Run No.: 2

(Indirect costs totaling \$ 34,991 have been burdened over direct costs totaling \$ 307,356)

REF.	OPERATION	QUANTITY	MANHOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	SUB-CONTRACTS	TOTAL DIRECT COST	INDIRECT COST BURDEN	BID AMOUNT
** ALTERNATIVE 1 - ALTERNATIVE 1, 8.6 ACRE FEET **											
101	MOBILIZATION & WORKER TRG	1.00 LS	1,376	29,600		6,600	2,200	24,000	62,400	7,104	69,504
102	BOND PREMIUM	1.00 LS						2,200	2,200	250	2,450
103	CREDIT FOR EMB NOT PLACED	-42,632.00 CY						2,280 -97,201	2,280 -97,201		2,280 -97,201
104	POND EMBANKMENT	42,632.00 CY	0.054 2,302	1,203 51,286	0.200 8,526	0.776 33,082	0.185 7,887		2,364 100,781	0.269 11,473	2 112,254
105	FURNISH & INSTALL LINER	10,401.00 SY	0.106 1,106	1,760 18,308	1.957 20,352	0.101 1,049	1.122 11,668		4,939 51,372	0.562 5,848	5,501 57,220
106	REMOVE POND @ END JOB	42,636.00 CY	0.056 2,403	1,164 49,646		0.791 33,746	0.169 7,211		2,125 90,603	0.242 10,315	2,367 100,918
191	CONTRACTORS FIELD O'HEAD	1.00 LS		12,130		1,300	1,000		14,430	-14,430	0
192	CONTRACTORS PROFIT	1.00 LS						20,561	20,561	-20,561	0
* Subtotals, ALTERNATIVE 1:			7,187	160,965	28,878	75,777	29,966	-50,440	245,146	-1	245,145
GRAND TOTALS:			7,187	160,965	28,878	75,777	29,966	-50,440	245,146	-1	245,145

Delete

09/13/93
2:21pm

Project: UMTA RIFLE POND
Number: 3885-70-5913

Morrison Knudsen Corporation
Standard Cost Estimate Summary
ESTIMATE SUMMARY, ALTERNATIVE 2 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE ITEM
Subtotals for: ALTERNATIVE

Est. By: TD
Run No.: 2

(Indirect costs totaling \$ 46,061 have been burdened over direct costs totaling \$ 438,946)

REF.	OPERATION	QUANTITY	MANHOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	SUB-CONTRACTS	TOTAL DIRECT COST	INDIRECT COST BURDEN	BID AMOUNT
** ALTERNATIVE: 2 - ALTERNATIVE 2, 14 ACRE FEET **											
201	MOBILIZATION & WORKER TRNG	1.00 LS	1,416	30,440		6,600	2,200	24,800	64,040	6,720	70,760
202	BOND PREMIUM	1.00 LS						2,200	2,200	231	2,431
203	CREDIT FOR EMB NOT PLACED	-62,666.00 CY						2,280	2,280		2,280
								-142,878	-142,878		-142,878
204	POND EMBANKMENT	62,666.00 CY	0.054 3,386	1,204 75,428	0.200 12,540	0.776 48,655	0.185 11,600		2,365 148,223	0.248 15,554	2 163,...
205	FURNISH & INSTALL LINER	16,390.00 SY	0.109 1,790	1,808 29,626	1.980 32,448	0.104 1,698	1.128 18,494		5,019 82,266	0.527 8,633	5,546 90,899
206	REMOVE POND @ END JOB	62,666.00 CY	0.061 3,830	1,254 78,581		0.824 51,852	0.182 11,379		2,260 141,612	0.237 14,860	2,497 156,472
226	ADDITIONAL LINER MAINTMC	1.00 LS	37	555		21	29		605	63	668
291	CONTRACTORS FIELD O'HEAD	1.00 LS		14,732		1,700	1,500		17,932	-17,932	0
292	CONTRACTORS PROFIT	1.00 LS						28,129	28,129	-28,129	0
* Subtotals, ALTERNATIVE 2:			10,459	229,362	44,988	110,326	45,202	-87,749	342,129		342,129
GRAND TOTALS:			10,459	229,362	44,988	110,326	45,202	-87,749	342,129		342,129

Delete

09/13/93
2:21pm

Project: UMTRA RIFLE POND
Number: 3885-70-5913

Morrison Knudsen Corporation
Standard Cost Estimate Summary
ESTIMATE SUMMARY, ALTERNATIVE 3 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE ITEM
Subtotals for: ALTERNATIVE

Est. By: TD
Run No.: 2

(Indirect costs totaling \$ 76,896 have been burdened over direct costs totaling \$ 972,694)

REF.	OPERATION	QUANTITY		MANHOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	SUB-CONTRACTS	TOTAL DIRECT COST	INDIRECT COST BURDEN	BID AMOUNT
** ALTERNATIVE: 3 - ALTERNATIVE 3, 29 ACRE FEET **												
301	MOBILIZATION & WORKER TRG	1.00	LS	1,496	32,120		6,600	2,200	26,400	67,320	5,322	72,642
302	BOND PREMIUM	1.00	LS						2,200	2,200	174	2,374
303	CREDIT FOR EMB NOT PLACED	-107,753.00	CY						2,280	2,280		2,280
									-245,677	-245,677		-245,677
304	POND EMBANKMENT	107,753.00	CY	0.054 5,819	1.203 129,627	0.200 21,551	0.776 83,617	0.185 19,934		2,364 254,729	0.187 20,130	2,551 274,859
305	FURNISH & INSTALL LINER	32,094.00	SY	0.109 3,495	1.803 57,856	2.016 64,704	0.103 3,316	1.127 36,176		5,049 162,052	0.399 12,811	5,448 174,863
306	REMOVE POND @ END JOB	107,753.00	CY	0.060 6,488	1.237 133,268		0.818 88,138	0.179 19,310		2,234 240,716	0.177 19,030	2,411 259,746
391	CONTRACTORS FIELD O'HEAD	1.00	LS		25,017		3,100	2,508		30,625	-30,625	0
392	CONTRACTORS PROFIT	1.00	LS						46,271	46,271	-46,271	0
* Subtotals, ALTERNATIVE 3:				17,298	377,888	86,255	184,771	80,128	-170,806	558,236	-19,421	538,815
GRAND TOTALS:				17,298	377,888	86,255	184,771	80,128	-170,806	558,236	-19,421	538,815

Delete

09/13/93
2:21pm

Project: UMTRA RIFLE POND
Number: 3885-70-5913

Morrison Knudsen Corporation
Standard Cost Estimate Summary
ESTIMATE SUMMARY, ALTERNATIVE 4 (PARTIAL SUMMARY)
Sorted by: ALTERNATIVE, ITEM
Subtotals for: ALTERNATIVE

Est. By: TD
Run No.: 2

(Indirect costs totaling \$ 97,913 have been burdened over direct costs totaling \$ 637,921)

REF.	OPERATION	QUANTITY		MANHOURS	LABOR & INSURANCE	PERMANENT MATERIALS	EQUIPMENT	SUPPLIES	SUB-CONTRACTS	TOTAL DIRECT COST	INDIRECT COST BURDEN	BID AMOUNT
** ALTERNATIVE: 4 - ALTERNATIVE 4, 42 ACRE FEET **												
401	MOBILIZATION & WORKER TRG	1.00 LS		1,656	35,480		6,600	2,200	29,600	73,880	11,340	85,220
402	BOND PREMIUM	1.00 LB							2,200	2,200	338	2,538
403	CREDIT FOR EMB NOT PLACED	-142,788.00 CY							2,280	2,280	0.350	2,630
									-325,557	-325,557	-49,969	-375,526
404	POND EMBANKMENT	142,788.00 CY		0.054 7,711	1,203 171,775	0.200 28,558	0.776 110,803	0.185 26,415		2,364 337,551	0.363 51,810	389,861
405	FURRING & INSTALL LINER	45,417.00 SY		0.109 4,947	1,803 81,898	2.017 91,584	0.103 4,694	1.127 51,197		5,050 229,373	0.775 35,206	5,825 264,579
406	REMOVE POND @ END JOB	142,788.00 CY		0.061 8,650	1,244 177,590		0.821 117,158	0.180 25,726		2,244 320,474	0.344 49,189	2,588 369,663
491	CONTRACTORS FIELD O'HEAD	1.00 LS			30,159		3,400	3,000		36,559	-36,559	0
492	CONTRACTORS PROFIT	1.00 LB							61,354	61,354	-61,354	0
* Subtotals, ALTERNATIVE 4:				22,964	496,902	120,142	242,655	108,538	-232,403	735,834	1	735,835
GRAND TOTALS:				22,964	496,902	120,142	242,655	108,538	-232,403	735,834	1	735,835

Delete