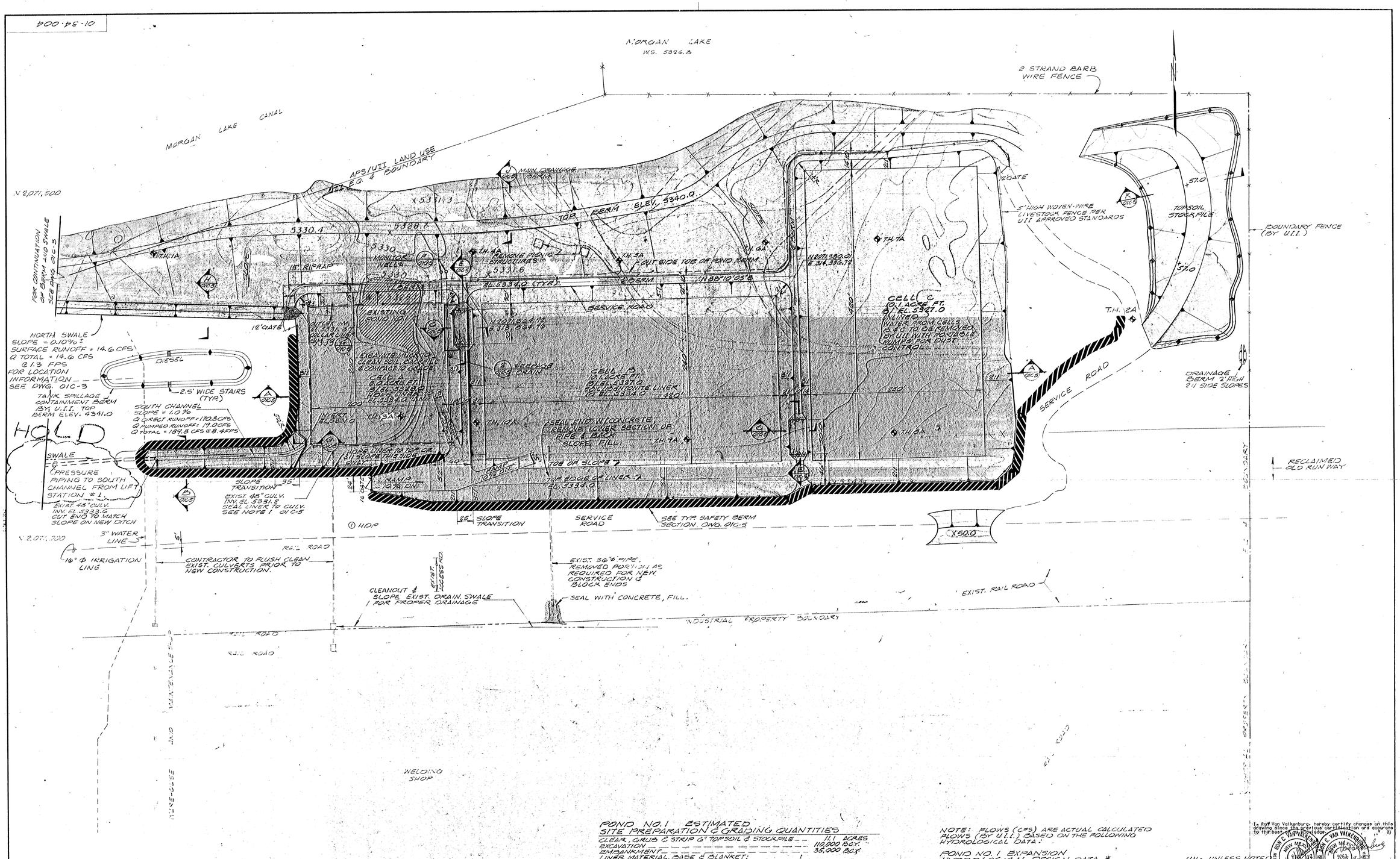
01-34-004



POND NO. 1 ESTIMATED SITE PREPARATION & GRADING QUANTITIES

CLEAR, GRUB & STRIP 6" TOPSOIL & STOCKPILE	1.1 ACRES
EXCAVATION	110,000 B.C.Y.
EMBANKMENT	35,000 B.C.Y.
LINER MATERIAL, BASE & BLANKET:	
CELL A	6,400 S.Y.
CELL B	15,000 S.Y.
SOUTH CHANNEL	390 S.Y.
4" Φ PERFORATED SEEPAGE DRAIN PIPE	800 L.F.
4" Φ PVC SEEPAGE DRAIN PIPE	90 L.F.
RIPRAP	200 C.Y.

NOTE: FLOWS (CFS) ARE ACTUAL CALCULATED FLOWS (BY U.I.I.) BASED ON THE FOLLOWING HYDROLOGICAL DATA:

POND NO. 1 EXPANSION
HYDROLOGICAL DESIGN DATA *

AREA = 108 ACRES
LENGTH = 2400 FT.
CONCENTRATION TIME = 0.44 HRS.
CURVE NO. = 77
PRECIPITATION (100 YR. - 24 HR.) = 2.7 INCHES
RUNOFF = 2.38 INCHES
RUNOFF VOLUME (100 YR.) = 21.42 ACRE FEET

* SEE UTAH INTERNATIONAL DWG. UI:-09-2000-08.

UN = UNLESS NOTED

I, Rolf Van Valkenburg, hereby certify changes on this drawing since the previous certification are accurate to the best of my knowledge.

ROLF C. VAN VALKENBURG NEW MEXICO PROFESSIONAL ENGINEER 9263 9-8-93

SEP 17 1993

EXHIBIT II-24

01-34-003, 01C-3 PLOT, GRADING & DRAINAGE NO. 2
01-34-005 01C-5 POND #1 EXP & CHANNEL SECT. & DET.
UI:-09-2000-08 UTAH INTER. PROP. POND #1 EXPANSION

REVISIONS			
6	JG	8/20/93	CHANGE EXHIBIT TO II-24 AND CHANGE CO. NAME
5	KD	9-11-85	ISSUE FOR AS-BUILTS FOLLOWING OWNER REVIEW & REV. OF NORTH SWALE BUL.# 006
4	KD	9-11-85	ISSUE FOR AS BUILT CHANGES FOLLOWING UII REVIEW BUL.D-005
3	RJ	8/29/85	ISSUE FOR AS BUILT BUL.D-004
2	RJ	7/9/85	REDESIGN BERM & POND BUL.D-002

APPROVALS	2	3	4	5
DEPT REV				
ARCH				
CIV/STR				
MECH				
ELECT				
INSTM				
PIPING				
SAFETY				
MINING				
DEPT MGR				

SCALE 1" = 50' DATE
DRAWN BY R. JEWELL JUNE '85
DESIGNED BY P.S. BAIR JUNE '85
CHECKED BY M. Morse July '85
CLIENT APPROVAL

REV	BY	DATE
2	JS	7/2/85
3		
4		
5		

MORRISON-KNUDSEN ENGINEERS, INC.
A MORRISON KNUDSEN COMPANY

NAVAJO MINE PROJECT - AREA I
FRUITLAND, NEW MEXICO
BHP MINERALS INTERNATIONAL

PHASE 2
WASTEWATER COLLECTION/TREATMENT
PLOT, GRADING & DRAINAGE PLAN
NO. 3

1724-10 | 30 x 42
01-34-004
01C-4 | 5