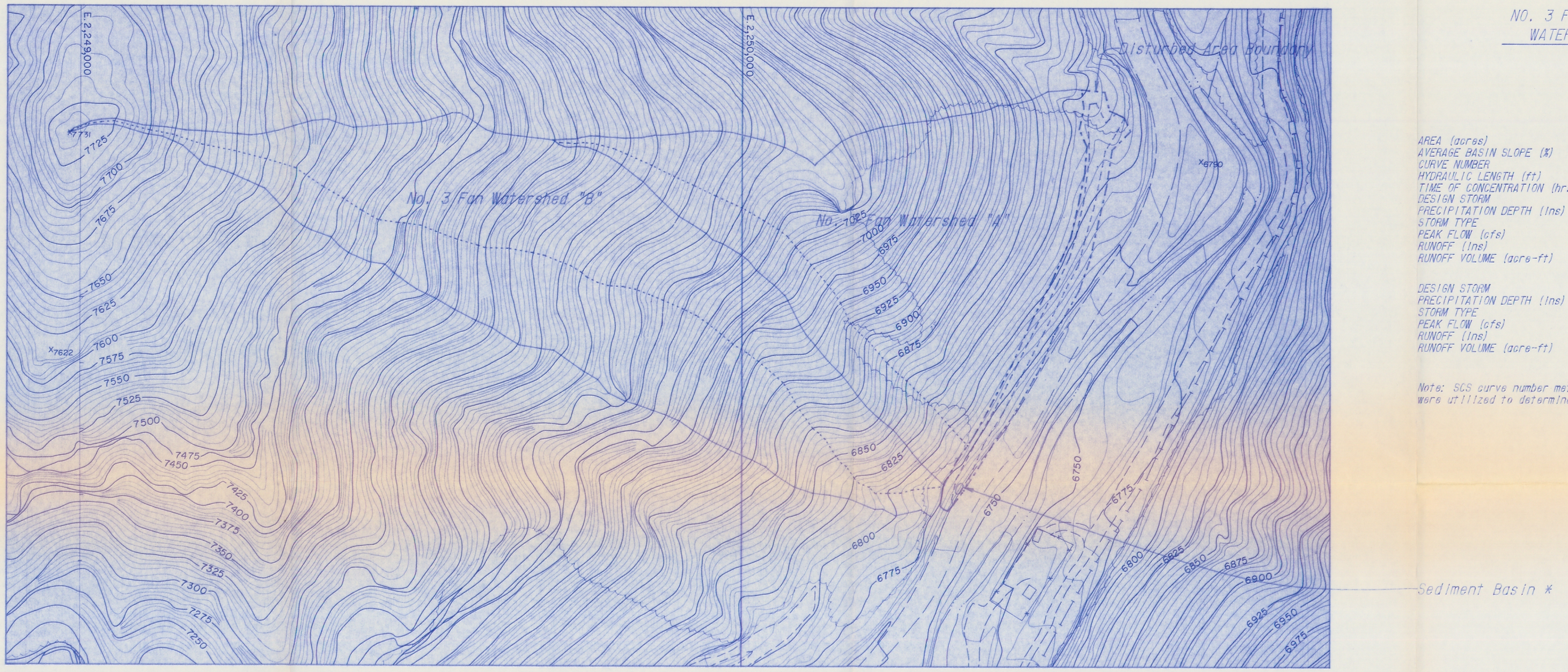

NO. 3 FAN EXPLORATION PROJECT
WATERSHED DESIGN SUMMARY

	NO. 3 FAN WATERSHED		ROAD B
	A	B	ROAD UP-SLOPE
AREA (acres)	4.91	6.01	0.42
AVERAGE BASIN SLOPE (%)	67.5	78.4	44.1
CURVE NUMBER	75	75	78
HYDRAULIC LENGTH (ft)	810	1,500	675
TIME OF CONCENTRATION (hrs)	0.063	0.096	0.042
DESIGN STORM	10yr-6hr	10yr-6hr	10yr-6hr
PRECIPITATION DEPTH (ins)	1.52	1.52	1.52
STORM TYPE	SCS Type "B"	SCS Type "B"	SCS Type "B"
PEAK FLOW (cfs)	0.57	0.70	0.08
RUNOFF (ins)	0.17	0.17	0.24
RUNOFF VOLUME (acre-ft)	0.0712	0.0841	0.0085
DESIGN STORM	10yr-24hr	10yr-24hr	10yr-24hr
PRECIPITATION DEPTH (ins)	1.85	1.85	1.85
STORM TYPE	Type II	Type II	Type II
PEAK FLOW (cfs)	1.67	2.04	0.19
RUNOFF (ins)	0.31	0.31	0.40
RUNOFF VOLUME (acre-ft)	0.1269	0.1553	0.0141

Note: SCS curve number methodology and Sedimot II computer program were utilized to determine the watershed characteristics.

RECEIVED
OCT 26 1992
DIVISION OF
OIL GAS & MINING

* SEDIMENTATION BASIN DESIGN - A small sediment basin has been constructed at the base of the exploration road as a final sediment control measure. This basin has been located north of the outlet of watershed B and west of the county road shoulder drainage ditch. It will therefore only receive runoff from the exploration road, road up-slope and watershed A. It has been located where it will not interfere with normal usage of the county road.

The size of the sediment basin has been constructed approximately 30'L x 15'W x 2'D. Also the design peak inflow to the basin has been calculated at 1.85 cfs. Sediment basin design methodology as detailed by Edward A. Hansen, (Hydrologist, North Central Forest Experiment Station, Region 9) indicates that this basin will remove nearly 100% of the sediment particles measuring 0.125 mm or larger. The outlet of this basin is also treated with a silt fence.

NORTH

Registered Professional Engineer
No. 4028
J. THOMAS PALUSO
State of Utah

I, being a professional engineer hereby certify that this map was prepared by me or under my direct supervision and that all information contained thereon is true and correct to the best of my knowledge and information.

VOLUME 7 FILE COPY

MRP Revision 07/28/92

Exhibit 7.42-2

Soldier Creek Coal Company
SC3
a subsidiary of Sun Coal Company

TITLE:	No. 3 Fan Exploration (ASCA #9)
PROJECT:	Runoff/Sediment Control Design
DRAWN BY:	D.G.S.
CHECKED BY:	
APPROVED BY:	
DATE:	04/02/92
DATE:	
DATE:	
SCALE:	1" = 100'
DRAWING NO.	D 356
VCAD-#8FAN.2D	

SOLDIER CANYON MINE

REVISIONS		
NO.	DATE	BY
1	07/25/92	D.G.S.
2		
3		

Note: Project is Located in the SE1/4, Sec.7, T13S, R12E, S.L.B.& M.

Cross Reference - Exhibit 7.42-1 No. 3 Fan Exploration "As-Builts"