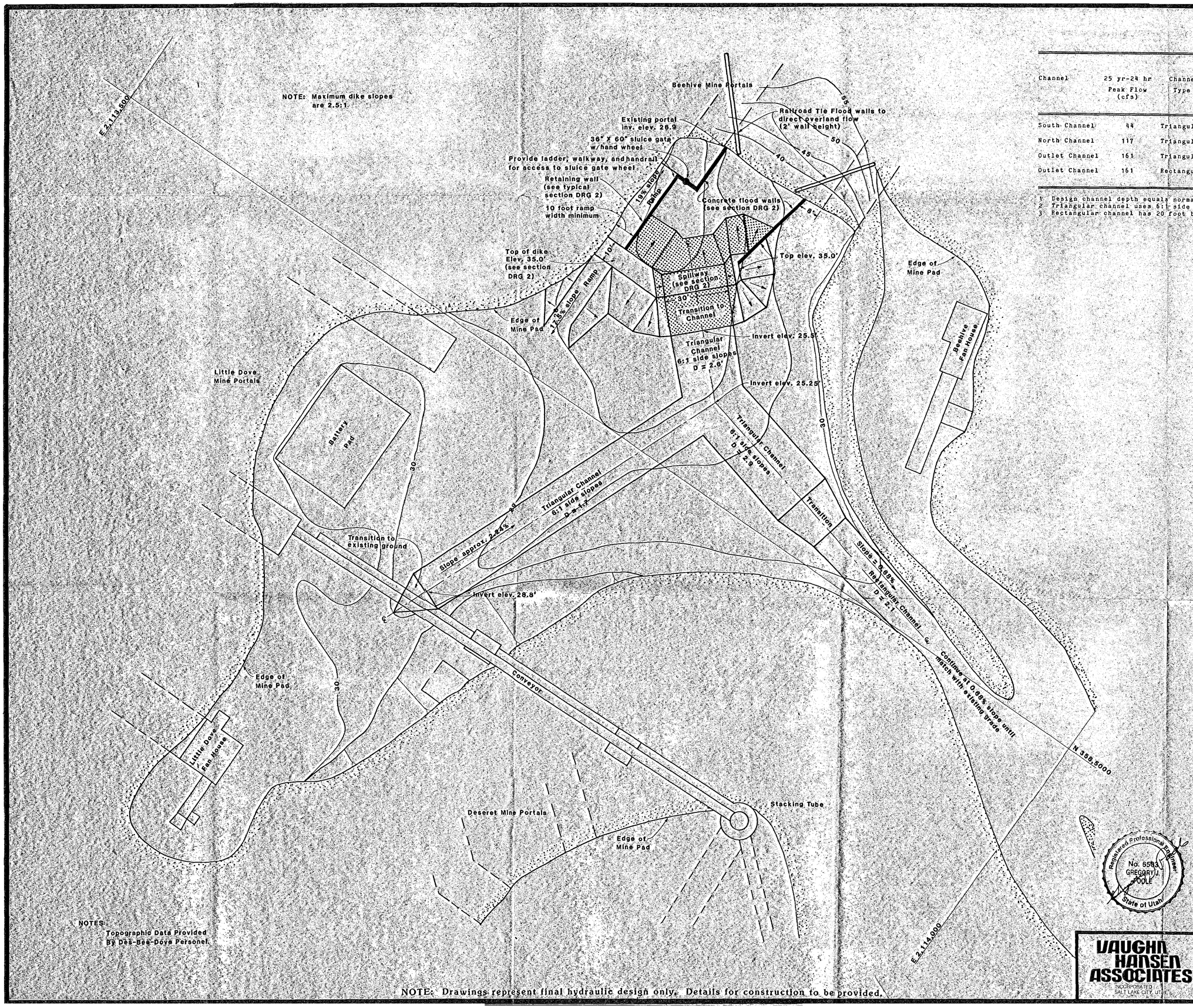

Channel Design Table

Channel	25 yr-24 hr Peak Flow (cfs)	Channel Type	Mannings N	Slope %	Normal Depth (ft)	Design[1] Channel Depth (ft)	Average Velocity (fps)
South Channel	44	Triangular[2]	0.03	2.24	1.2	1.7	5.1
North Channel	117	Triangular	0.03	0.68	2.1	2.6	4.4
Outlet Channel	161	Triangular	0.03	0.68	2.4	2.9	4.6
Outlet Channel	161	Rectangular[3]	0.03	0.68	1.6	2.1	5.0

1 Design channel depth equals normal depth plus 0.5' freeboard.
2 Triangular channel uses 6:1 side slopes for vehicle access.
3 Rectangular channel has 20 foot bottom width.

Scale: 1" = 20'

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3-11
ADDITION
10-1-84

Utah Power and Light Co.
Des-Bee-Dove Mine

TITLE
First North Portal
Beehive Mine
New Water Control Structures

VAUGHN HANSEN ASSOCIATES
INCORPORATED
SALT LAKE CITY, UTAH

REVISIONS BY	DATE			APPROVED BY	DATE
		ENGINEERING BY	KCS Aug. 1984		
		REVIEWED BY	GJP Aug. 1984		
		DRAWN BY	DRB Aug. 1984		
		SCALE	1" = 20'	DRAWING NO. 1	

NOTE: Drawings represent final hydraulic design only. Details for construction to be provided.