PUBLIC WORKS/HYDROLOGY

B23/D2

CHANNEL SECTION A-A

MANNINGS N=.030 SLOPE =.0700

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	6408.00	3	24.00	6395.00	5	45.00	6408.00
2	9.00	6400.00	4	33.00	6395.00	6	83.00	6401.00

WSEL	DEPTH IN	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID
6405.0	0.0	0.1	0.2	7.0	2.0	7.0
6405.5	0.5	6.7	30.1	12.5	7.0	11.9
6406.0	1.0	20.0	110.6	14.0	8.3	13.4
6406.5	1.5	36.6	253.4	15.5	10.1	14.9
6407.0	2.0	54.4	470.9	17.0	11.7	15.3
6407.5	2.5	69.6	699.2	22.0	12.9	21.2
6408.0	3.0	83.0	928.1	27.0	13.8	26.1
6408.5	3.5	97.0	1168.9	27.0	14.4	26.1
6409.0	4.0	111.6	1424.4	27.0	14.9	26.1
6409.5	4.5	126.6	1693.7	27.0	15.3	26.1
6410.0	5.0	142.0	1976.6	27.0	15.6	26.1
6410.5	5.5	157.8	2273.2	27.0	15.9	26.1
6411.0	6.0	173.9	2583.4	27.0	16.2	26.1
6411.5	6.5	190.4	2907.3	27.0	16.4	26.1
6412.0	7.0	207.2	3244.8	27.0	16.6	26.1

CROSS-SECTION A-A

Flow depth = 6.0'

CHANNEL SECTION B-B

MANNINGS N=.030 SLOPE =.0700

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	6412.06	3	20.00	6397.00	5	41.00	6401.00
2	13.00	6410.00	4	27.00	6405.00	6	79.00	6412.00

WSEL	DEPTH IN	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID
6405.0	0.0	0.0	0.2	7.0	4.8	7.7
6405.5	0.5	3.8	27.3	12.0	7.1	9.4
6406.0	1.0	9.4	98.2	13.2	10.5	12.1
6406.5	1.5	16.8	218.6	14.7	13.1	13.5
6407.0	2.0	24.9	376.4	16.2	15.1	14.9
6407.5	2.5	33.6	570.4	17.7	17.0	16.3
6408.0	3.0	43.0	799.2	19.2	18.6	17.8
6408.5	3.5	53.1	1063.7	20.7	20.0	19.2
6409.0	4.0	63.8	1363.1	22.2	21.4	20.6
6409.5	4.5	75.2	1697.4	23.7	22.6	22.0
6410.0	5.0	87.2	2066.6	25.2	23.7	23.4
6410.5	5.5	99.8	2470.7	26.7	24.8	24.8
6411.0	6.0	113.0	2909.7	28.2	25.8	26.2
6411.5	6.5	126.8	3383.6	29.7	26.7	27.6
6412.0	7.0	141.2	3892.4	31.2	27.6	29.0

CROSS-SECTION B-B

Flow depth = 5'
(by Manning's)

CHANNEL SECTION C-C

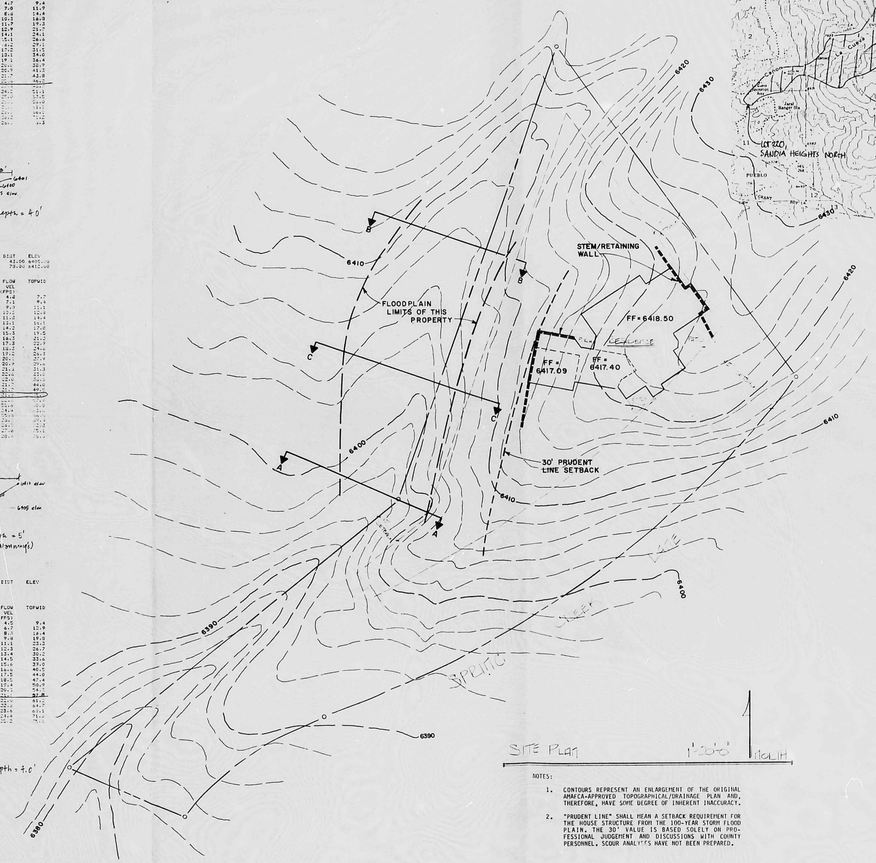
MANNINGS N=.030 SLOPE =.0700

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	6410.00	3	44.00	6400.00			
2	20.00	6400.00	4	99.00	6405.00			

WSEL	DEPTH IN	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID
6400.0	0.0	0.0	0.0	20.0	4.0	20.0
6400.5	0.5	8.7	35.4	33.0	4.0	32.9
6401.0	1.0	19.4	79.0	34.5	4.1	34.4
6401.5	1.5	30.8	129.8	36.0	4.2	35.9
6402.0	2.0	43.0	190.4	37.5	4.4	37.4
6402.5	2.5	55.8	261.7	39.0	4.7	38.9
6403.0	3.0	69.3	344.2	40.5	5.0	40.4
6403.5	3.5	83.4	438.1	42.0	5.3	41.9
6404.0	4.0	98.1	543.8	43.5	5.5	43.4
6404.5	4.5	113.4	661.5	45.0	5.8	44.9
6405.0	5.0	129.3	791.4	46.5	6.1	46.4
6405.5	5.5	145.8	933.8	48.0	6.4	47.9
6406.0	6.0	162.9	1089.0	49.5	6.7	49.4
6406.5	6.5	180.6	1257.3	51.0	7.0	50.9
6407.0	7.0	198.9	1439.1	52.5	7.2	52.4

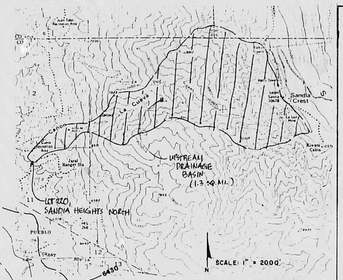
CROSS-SECTION C-C

Flow Depth = 7.0'



NOTES:

1. CONTOURS REPRESENT AN ENLARGEMENT OF THE ORIGINAL AMAFCA-APPROVED TOPOGRAPHICAL/DRAINAGE PLAN AND, THEREFORE, HAVE SOME DEGREE OF INHERENT INACCURACY.
2. "PRUDENT LINE" SHALL MEAN A SETBACK REQUIREMENT FOR THE HOUSE STRUCTURE FROM THE 100-YEAR STORM FLOOD PLAIN. THE 30' VALUE IS BASED SOLELY ON PROFESSIONAL JUDGEMENT AND DISCUSSIONS WITH COUNTY PERSONNEL. SCOUR ANALYTS HAVE NOT BEEN PREPARED.



REFERENCE: USGS QUAD MAP "SANDIA CREST"

LA LUNA ARROYO

RUNOFF CALCULATIONS

1. UPSTREAM BASIN = 852 acres, 1.33 sq. miles
2. Time of Concentration =
   - Longest Reach = 4,410'
   - Δ Elev. = 210'
   - Slope = 4.8% (5.2%)
   - T_c (Kirpich) = $0.0078 \frac{(4410)^{.77}}{(210)^{.385}}$ = 20.11 min.
3. Point Rainfall = 3" (1/hr)
4. Q_{100} BC (CFM)
5. Direct Runoff = 1.8" (CFM/acre)
6. [illegible] 50 min
7. Q_{100} = 46.4 (CFS) = 1570 cfs, west of DR
8. [illegible] (15') = 1426 cfs

CERTIFICATION

I HEREBY CERTIFY THAT I HAVE PERSONALLY REVIEWED THE SITE AND BELIEVE THAT THE TOPOGRAPHIC DATA REPRESENTED HEREIN IS SUBSTANTIALLY COMPLETE AND ACCURATE.

RECEIVED
NOV 22 1990
HYDROLOGY DIVISION

Based on the information provided hereon, the County Public Works Dept. has no objection to issuing permit.
APPROVED FOR BUILDING PERMIT:

COUNTY PUBLIC WORKS DEPT.

PLOTTING DATE: MAY 15, 1990
LAST REVISION:

GRADING/DRAINAGE PLAN

CHARLIE & THERESE
300 SPRUCE CREEK TRAIL NE
ALBUQUERQUE, NM 87122

Greg Baczek
Fine Home Builder
Design • Construction
(505) 255-0387
P.O. Box 80118
Albuquerque, N.M. 87198
Lic. No. 19852

Sheet 1

R# 24 DATE 3/4/92 DP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the **Public Works Department** and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS115-1977)

DIRECTOR

CITY OF ALBUQUERQUE
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My Commission Expires

PLANS/PLATS ON FILE

FILE DESC: B23/02

PLANS/PLATS 1

F30 D24 C20 B16 A12 CITY OF ALBUQERQUE C D F