

GRAPHIC SCALE  
1" = 20'

CURB TO BE PAINTED RED  
"NO PARKING - FIRE LANE"  
(TYPICAL)

**SEWER MANHOLE DATA TABLE**

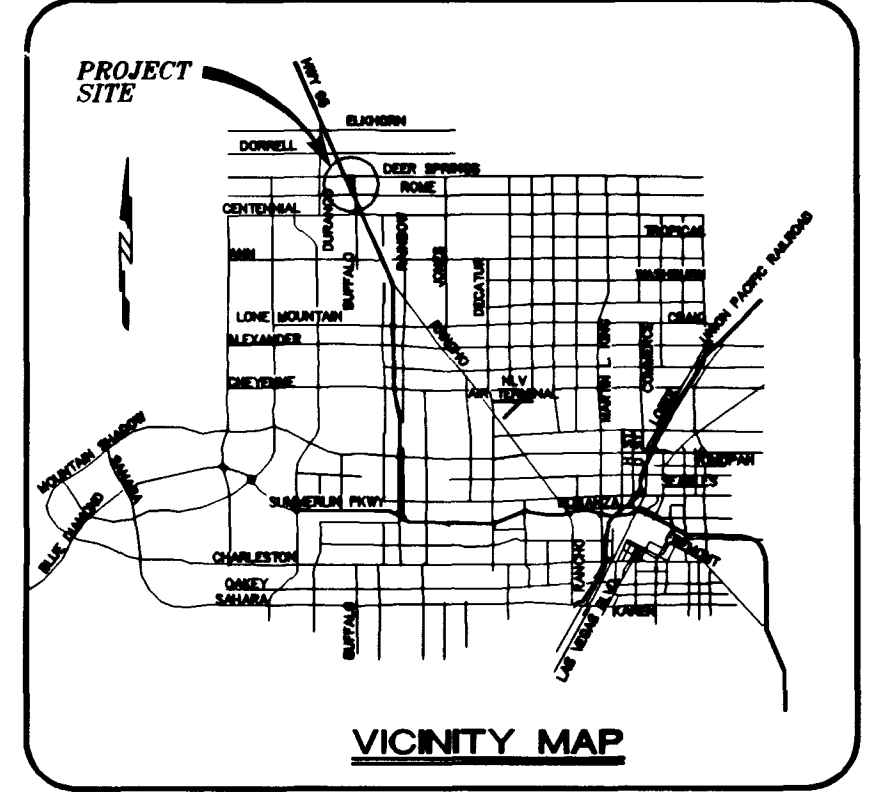
SMH #	TMH	INV. IN	INV. OUT	NORTHING	EASTING
EX.	17.7±	09.93	09.73	809555.42	750085.34
1	20.1±	15.01	14.81	809881.55	750092.73
2	21.3±	15.70	15.50	809882.39	749976.21
3	21.9±	16.45	16.25	809993.30	749978.72
4	22.8±	16.80	16.60	810021.82	749971.07
5	23.5±	17.44	17.24	810003.73	749901.53
6	28.3±	22.58	22.38	810005.50	749654.33
7	29.5±	24.40	24.20	810020.82	749492.64
8	30.4±	24.82	24.62	810029.67	749472.03
9	22.2±	17.18	16.98	810050.85	749983.48
10	23.0±	18.16	17.96	810207.79	749954.37
11	24.0±	19.02	18.82	810333.46	749968.25

**SEWER CLEANOUT DATA TABLE**

CO #	TCO	INV. IN	INV. OUT	NORTHING	EASTING
1	22.2±	17.18	16.98	810050.85	749983.48
2	22.6±	17.60	17.40	810021.82	749971.07
3	23.0±	18.01	17.81	810003.73	749901.53
4	23.5±	18.54	18.34	810005.50	749654.33
5	24.0±	19.07	18.87	810020.82	749492.64
6	24.5±	19.72	19.52	810029.67	749472.03
7	25.0±	20.31	20.11	810050.85	749983.48
8	25.5±	20.86	20.66	810058.85	749973.36
9	25.2±	20.74	20.54	810432.34	749891.57
10	26.3±	21.19	20.99	810439.05	749848.93
11	26.4±	21.43	21.23	810084.49	749753.17
12	27.0±	22.38	22.18	810156.24	749753.69
13	28.5±	23.02	22.82	810181.66	749720.40
14	31.0±	24.26	24.06	810281.63	749722.66
15	32.0±	25.50	25.30	810381.58	749719.57
16	32.5±	26.40	26.20	810449.26	749713.55
17	30.4±	27.44	27.24	810541.24	749752.78
18	22.6±	15.83	15.63	809898.74	750052.99
19	26.1±	17.21	17.01	809927.55	749934.50
20	23.4±	19.31	19.11	810078.98	750057.25
21	23.4±	19.31	19.11	810080.93	750054.27
22	27.0±	20.68	20.48	810240.33	749862.93
23	26.1±	21.25	21.05	810267.83	749865.96
24	27.0±	20.77	20.57	810222.38	749872.52
25	27.1±	20.92	20.72	810223.98	749862.95
26	24.4±	20.29	20.09	810234.21	750032.65

**SEWER CLEANOUT DATA TABLE**

CO #	TCO	INV. IN	INV. OUT	NORTHING	EASTING
27	24.5±	20.16	19.96	810244.15	750031.75
28	28.8±	21.18	20.98	810440.12	749875.82
29	29.6±	22.14	21.94	810471.10	749834.91
30	29.7±	22.31	22.11	810466.79	749826.65
31	25.2±	20.78	20.58	810444.88	750042.65
32	25.3±	20.88	20.68	810449.38	750042.75
33	25.6±	22.00	21.80	810633.08	750032.16
34	27.0±	22.36	22.16	810668.05	750032.08
35	27.0±	22.36	22.16	810666.36	750029.74
36	24.6±	18.58	18.38	810054.94	749902.85
37	27.9±	22.99	22.79	810051.30	749890.08
38	29.6±	24.78	24.58	809932.88	749625.58
39	30.0±	24.85	24.65	809932.90	749620.62
40	30.9±	24.78	24.58	810061.87	749579.88
41	30.4±	25.60	25.40	810183.43	749673.21
42	31.7±	26.09	25.89	810187.95	749673.00
43	32.8±	26.09	25.89	810409.06	749710.55
44	33.0±	27.26	27.06	810452.94	749642.93
45	33.3±	28.05	27.85	810480.00	749572.07
46	33.0±	28.63	28.43	810499.50	749520.98
47	35.0±	29.91	29.71	810557.09	749516.78
48	33.6±	27.48	27.28	810503.98	749718.82
49	29.6±	28.25	28.05	810603.15	749745.03
50	34.2±	28.88	28.68	810658.11	749737.32
51	34.2±	28.83	28.63	810659.32	749739.31



**PROJECT BENCHMARK**  
 TBM, 1169 3" BRASS CAP USC & GS 50' EAST OF US 95 & 200' ± SOUTH OF CENTENNIAL ON 88 DATUM METER 734.5745=2410.02 FEET  
 TBM # 1LV9028NNE6

**BASIS OF BEARINGS**  
 THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH, AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NCS83), EAST ZONE, (2701), AS DETERMINED BY NORTH LAS VEGAS HARN CONTROL POINTS 700, 704, 714, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 82 OF SURVEYS, AT PAGE 52.

**Call before you Dig**  
**Call before you OVERHEAD**  
 1-800-227-2600 1-702-593-6111  
 ESTIMATE OF QUANTITIES/LEGEND

WATER	PRIVATE	PUBLIC
1" FIRE HYDRANT ASSEMBLY per (udocs plate 7) (INCLUDES 8"x6" TEE & 6" GV)	15 EA.	
10"x8" REDUCER	2 EA.	
8"x6" REDUCER	2 EA.	
10" GATE VALVE	9 EA.	
6" GATE VALVE	2 EA.	2 EA.
10"x10"x10" TEE	2 EA.	
10"x8" WET TAP		2 EA.
90° BEND	7 EA.	
45° BEND	5 EA.	
22.5° BEND	4 EA.	
11.25° BEND	3 EA.	
3/4" FMC		
6"x3" FMC WITH 8" RPPA PER PLATE 11B	2 EA.	
10" WATER LINE	2614 LF.	
8" WATER LINE	307 LF.	
6" WATER LINE	432 LF.	176 LF.
2" WATER LINE	1121 LF.	
STANDARD MANHOLE	11 EA.	
CLEANOUT	47 EA.	
8" SEWER MAIN	691 LF.	1108 LF.
6" SEWER MAIN	821 LF.	
4" SEWER LATERALS	1352 LF.	

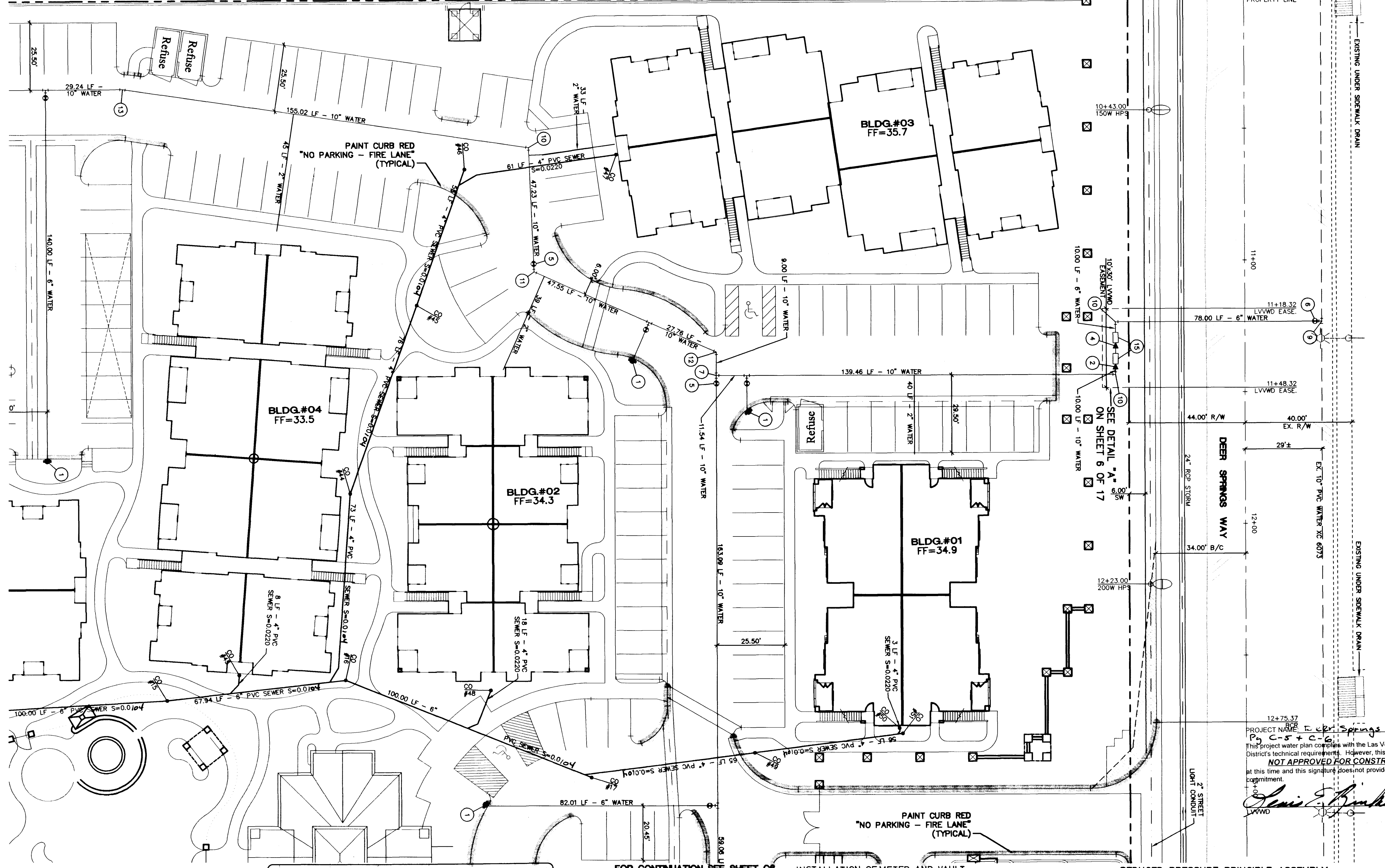
**SEWER CONTRIBUTION**  
 AVERAGE FLOW = 0.0510 MGD.  
 PEAK FLOW = 0.1185 MGD.

**STREET LIGHTS & SIGNAGE**  
 200W HPS LUMINAIRE 4 EA.  
 STOP SIGN 2 EA.  
 SERVICE POINT & RCOG 1 EA.

**SEWER CONNECTION NOTE**  
 A SEGMENT OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY HAVE BEEN DEDICATED AVAILABLE FOR SERVICE.

**FIRE FLOW DATA**  
 THE FIRE FLOW REQUIREMENTS IS 2500 GPM AT 20 PSI RESIDUAL PRESSURE.  
 BASED ON: PERLMAN ARCHITECTS BUILDING PLANS  
 SQUARE FOOTAGE: 18876 SF  
 LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: N/A  
 BUILDING HEIGHT: 34'-5 1/2" FEET  
 NUMBER OF STORIES: 2 FLOORS  
 TYPE OF CONSTRUCTION: II-1 HOUR  
 OCCUPANCY: R1  
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: N/A  
 REVIEWED BY: [Signature]  
 DATE: 6/30/99

**APPROVALS:**  
 [Signature] 6/30/99  
 CITY OF LAS VEGAS FIRE MARSHAL  
 [Signature] 6/30/99  
 NEVADA POWER COMPANY  
 DATE



NOTE: CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRIVATE ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.

NOTE: ALL CLEANOUTS LOCATED IN PAVED AREAS WILL BE PROVIDED WITH VALVE BOXES, TRAFFIC BEARING LIDS AND CONCRETE COLLARS.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) 1/8" RPPA WATTS # 909MT OR APPROVED EQUALS SHALL BE INSTALLED PER THE UDACS PLATE NO. 111. NO WATER SHALL BE TAKEN FROM THE SERVICE LINE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

**BIG SKY DEVELOPMENT**  
 2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89102-5148  
 3320 N. BUFFALO DRIVE LAS VEGAS, NEVADA 89129  
 (702) 395-2050

**MASTER UTILITY PLAN**  
 DEER SPRINGS APARTMENTS

**SEAL**  
 PROFESSIONAL ENGINEER STATE OF NEVADA  
 CIVIL  
 [Signature]  
 6-30-99

**SHEET**  
 5 OF 17 SHEETS  
 DRAWING NO. 107-V3108

**DATE**  
 MARCH 1999  
 MARCH 1999  
 MARCH 1999  
 SCALE: 1"=20' HORIZ. N/A VERT.

