

PUBLIC MANHOLE SCHEDULE

MH #	NORTHING	EASTING	RIM	INV IN	INV OUT
1A	281481.3373	485002.1959	2320.0±	2312.80	2312.60
1B	281479.7998	485172.6056	2321.8±	2311.75	2311.55
2	281331.9715	485171.2718	2321.2±	2310.81	2310.61
3	280903.0049	485167.4014	2318.3±	2308.46	2308.26
4	280860.0448	485560.5860	2316.5±	2306.29	2306.09
5	280826.7843	485864.9965	2315.1±	2304.57	2304.37
6	280927.8494	485876.0390	2315.0±	2303.86	2303.66
7	280696.0809	486218.8150	2313.5±	2300.82	2300.62
8	281009.8638	485987.1020	2314.2±	2302.97	2302.77
13	280857.2447	485071.214	2319.7±	2309.19	2308.99

UTILITY NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

INSTALLATION OF METER AND VAULT - (2) 6"x3' FMCT

THE METER(S) AND VAULT(S) WITH NON-TRAFFIC/TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 21D AND WITH STANDARD VAULT DRAWING C-475, LATEST REVISION.

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 TO THE VAULT(S) FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

METER MUST BE SET IN A HORIZONTAL POSITION AT LEAST EIGHT (8) DIAMETERS OF STRAIGHT PIPE ARE REQUIRED AT THE INLET END OF THE METER.

REDUCED PRESSURE PRINCIPLE ASSEMBLY - (2) 8"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11C. NO WATER SHALL BE TAKEN FROM A SERVICE 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. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION NOTES

- ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.E. W.V. BOX, WMH, ANNODE BOX, FH, TEL. BOX, ETC.)
- ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.
- CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- SEWER CLEANOUTS IN PAVED AREAS SHALL HAVE VALVE BOXES WITH TRAFFIC BEARING LIDS AND CONCRETE COLLARS.
- ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEM" (UDACS), LATEST EDITION.
- THIS SITE EXPERIENCES A STATIC PRESSURE IN EXCESS OF 80 PSI. INDIVIDUAL PRESSURE REDUCING VALVES ARE REQUIRED FOR ALL UNITS WITH A FINISHED FLOOR ELEVATION LESS THAN 2353.38. ALL INDIVIDUAL PRESSURE REDUCING VALVES ARE TO BE INSTALLED AND MAINTAINED BY THE OWNER/DEVELOPER IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE. ALL BUILDINGS HAVE FINISHED FLOOR ELEVATIONS LESS THAN 2353.38 AND WILL REQUIRE PRVS.
- THE CONTRACTOR IS TO INSTALL A PLASTIC LANDSCAPE METER BOX AT THE LOCATION WHERE THE WATER LATERAL TERMINATES TO EACH BUILDING.

LAS VEGAS FIRE DEPARTMENT

BASED ON
 SQUARE FOOTAGE: (NEW) 22,992 SF
 LARGEST AREA BETWEEN 4-HR AREA
 SEPARATION WALLS: NONE
 BUILDING HEIGHT: 35'
 NUMBER OF STORIES: 2 FLOORS
 OCCUPANCY: "B"
 FULL AUTOMATIC FIRE SYSTEM: YES
 TYPE OF CONSTRUCTION: V-1 HR
 ROOF CONSTRUCTION: TILE
 TOTAL FIRE FLOW = 2,750 GPM

*** WATER QUANTITIES**

	PUBLIC	PRIVATE
1 FIRE HYD. W/ASSEMBLY PER UDACS PLATE 7	3 EA	16 EA
2 8" GATE VALVE PER UDACS PLATE 5	1 EA	26 EA
3 8" 90° BEND PER UDACS PLATE 5	1 EA	5 EA
4 8" 45° BEND PER UDACS PLATE 5	4 EA	4 EA
5 8" 22.5° BEND PER UDACS PLATE 5	- EA	3 EA
6 8" 11.25° BEND PER UDACS PLATE 5	- EA	1 EA
7 8" TEE PER UDACS PLATE 5	- EA	4 EA
8 10" 45° BEND PER UDACS PLATE 5	4 EA	- EA
9 6" 45° BEND PER UDACS PLATE 5	4 EA	- EA
10 6"x3' FMCT PER UDACS PLATE 21D	2 EA	- EA
11 2" RPPA PER UDACS PL. NO. 11A	- EA	2 EA
12 8" RPPA PER UDACS PLATE NO. 11C	2 EA	- EA
13 8" X 6" REDUCER	- EA	14 EA
14 10" X 8" REDUCER	1 EA	- EA
15 16" X 10" TAPPING TEE W/ 10" TAPPING VALVE	2 EA	- EA
16 10" TEE W/ 8" REDUCER	1 EA	- EA
17 12" CAP W/ 2" BLOW-OFF PER UDACS PLATE 4	1 EA	- EA
18 SIAMESE FDC W/ 4" LINE TO RISER ROOM	- EA	27 EA
19 10" 90° BEND PER UDACS PLATE 5	1 EA	- EA
20 12" 90° BEND PER UDACS PLATE 5	1 EA	- EA
21 16" CUT IN VALVE PER UDACS PLATE 5	1 EA	- EA
22 2" WATER METER PER UDACS PLATE NO. 10	2 EA	- EA
23 10" TEE WITH 6" REDUCER PER UDACS PLATE 5	2 EA	- EA
24 10" TEE WITH 6" REDUCER PER UDACS PLATE 5	1 EA	- EA
25 10" GATE VALVE PER UDACS PLATE NO. 5	1 EA	- EA
10" PVC WATER MAIN	1,397 LF	- LF
8" PVC WATER MAIN	110 LF	3963 LF
6" PVC WATER MAIN	- LF	593 LF
4" WATER LATERAL (FIRE)	- LF	1220 LF
2" WATER LATERAL	- LF	985 LF
1" WATER LATERAL	- LF	194 LF

*** SEWER QUANTITIES**

	PUBLIC	PRIVATE
48" SEWER MANHOLE (DEPTH UNDER 6 FEET)	1 EA	5 EA
48" SEWER MANHOLE (DEPTH OVER 6 FEET)	1 EA	5 EA
8" PVC SEWER MAIN	2,579 LF	1118 LF
6" PVC SEWER LATERAL	- LF	1447 LF
4" PVC SEWER LATERAL	- LF	66 LF
3" PVC SEWER LATERAL	- LF	83 LF
SEWER CLEANOUT	- EA	7 EA
WATER/SEWER/STORM MAIN CROSSINGS	4 EA	- EA
INSTALL BACK WATER VALVE	- EA	3 EA

• ALL QUANTITIES ARE AN ESTIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR QUANTITIES FOR BIDDING PURPOSES.

LEGEND

PLEASE SEE SHEET 18 FOR LEGEND

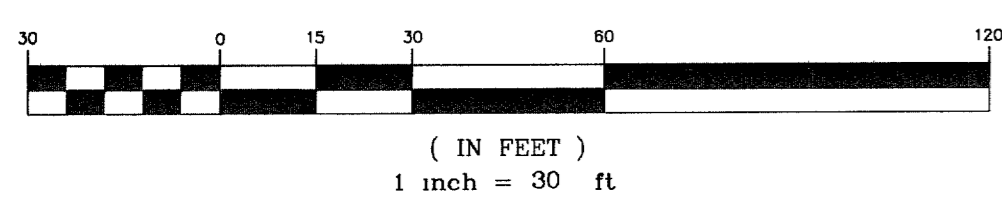
APPROVED FOR CONSTRUCTION

Signature: *Se. [Name]*
 LAS VEGAS VALLEY WATER DISTRICT
 DATE: 11-15-05
 Signature: *[Signature]*
 CLV FIRE DEPT.
 DATE: 3/16/05

FOR CONTINUATION SEE SHEET U2

FOR CONTINUATION SEE SHEET U5

GRAPHIC SCALE



BASIS OF BEARINGS:

THE BASIS OF BEARING FOR THIS SURVEY IS THE WESTERLY LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 20 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, COUNTY OF CLARK, STATE OF NEVADA, WHICH BEARS NORTH 00°31'01" EAST, AS PER MAP RECORDED IN BOOK 105, PAGE 58 OF PLATS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

BENCH MARK:

CITY OF LAS VEGAS BENCH MARK 1LV00 3NEE3
 CITY OF LAS VEGAS PIN AND PLATE IN THE TOP OF CURB, SOUTHWEST CORNER OF RAINBOW BOULEVARD AND RED COACH AVENUE NEAR THE PT OF RED COACH AVENUE
 NAVD '88 DATUM
 ELEVATION = 2319.021 U.S. SURVEY FEET
 ELEVATION = 706.839 METERS

CAUTION TO CONTRACTOR !

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Call before you Dig.

1-800-227-2600
 UNDERGROUND SERVICE (USA)

OVATION DEVELOPMENT
 1175 AMERICAN PACIFIC DRIVE, SUITE F
 HENDERSON, NEVADA 89074
 CONTACT: JAN GOYER (702) 990-2325

UTILITY PLAN IV
LONE MOUNTAIN APARTMENTS

DRAWN BY: MAY 2004
 DESIGNED BY: MAY 2004
 CHECKED BY: MAY 2004
 PROJECT NO. 652-E169
 SCALE: 1" = 30'

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA
 PETER J. LAAS
 Exp: 12/31/06
 CIVIL
 SHEET U4
 17 OF 41 SHEETS
 DRAWING NO. 107V 4322