

Call before you OVERHEAD 1-702-593-6111

Call before you Dig 1-800-227-2600

**LAS VEGAS FIRE DEPARTMENT**

FIRE FLOW REQUIREMENT IS 1,500 GALLONS/MIN. AT 20 PSI RESIDUAL.

BASED ON:

SQUARE FOOTAGE: < 3600  
LARGEST AREA BETWEEN SEPARATION WALLS: N/A  
HEIGHT: 2 STORY  
TYPE OF CONSTRUCTION:  
EXPOSURES: 10' MIN.  
SPRINKLER SYSTEM: YES  
OCCUPANCY: SINGLE FAMILY RESIDENCE  
ROOF CONSTRUCTION: CONCRETE TILE

REVIEWED BY: *[Signature]*  
DATE: 1/29/04  
PROVIDE FIRE LANE IDENTIFICATION PER CITY ORD. 3677

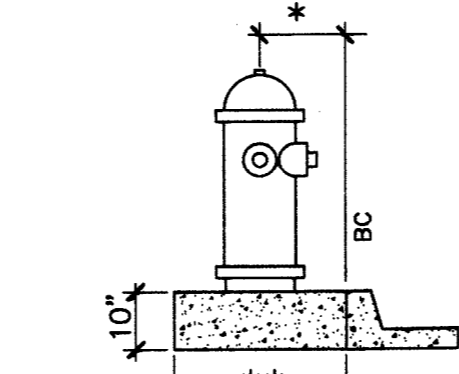
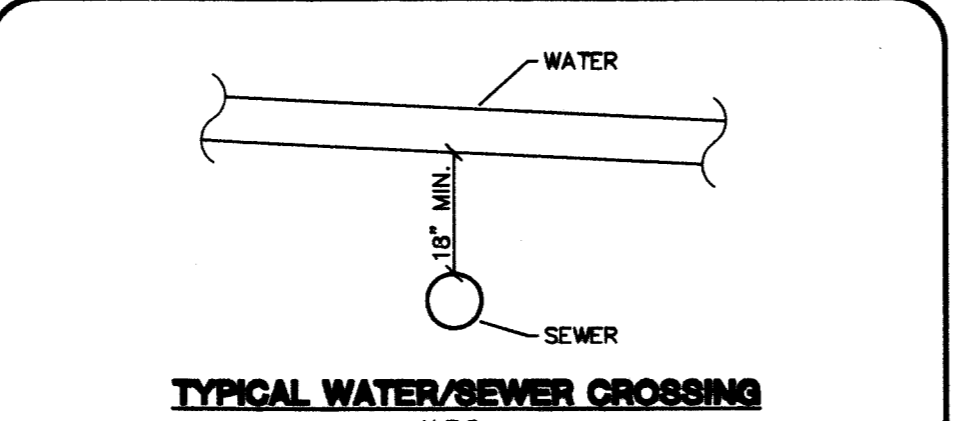
**PROJECT BENCHMARK**  
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)  
CITY OF LAS VEGAS BENCHMARK: 0030179E  
ELEVATION: 799.0857 METERS (2,621.67 FEET)  
RIVET AND SQUARE ALUMINUM PLATE IN TOP CENTER OF HEADWALL ON THE WEST SIDE OF U.S. 95 NEAR MILE MARKER 90.15.

**NOTE**  
ALL STREETS ARE PRIVATE DRIVES UNLESS OTHERWISE NOTED. ALL PRIVATE STREETS AND DRIVES ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

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

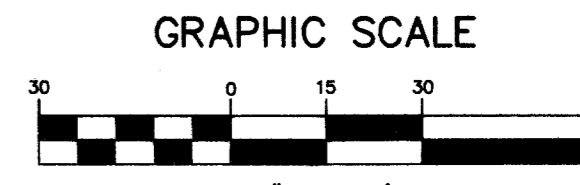
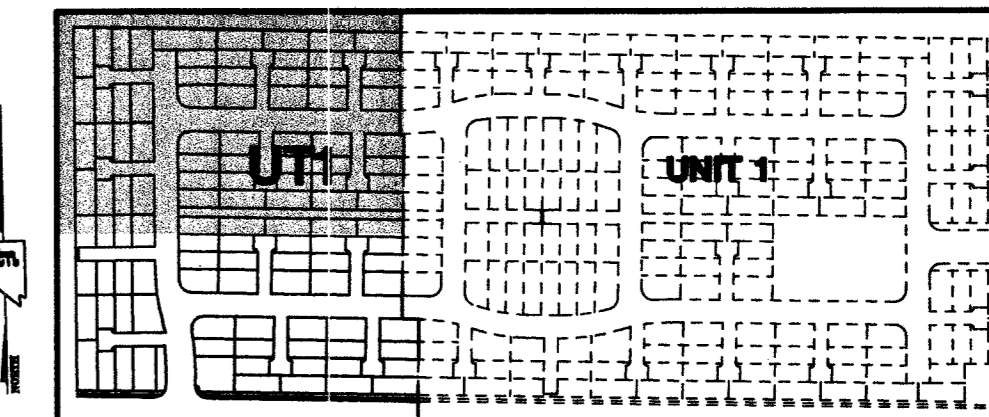
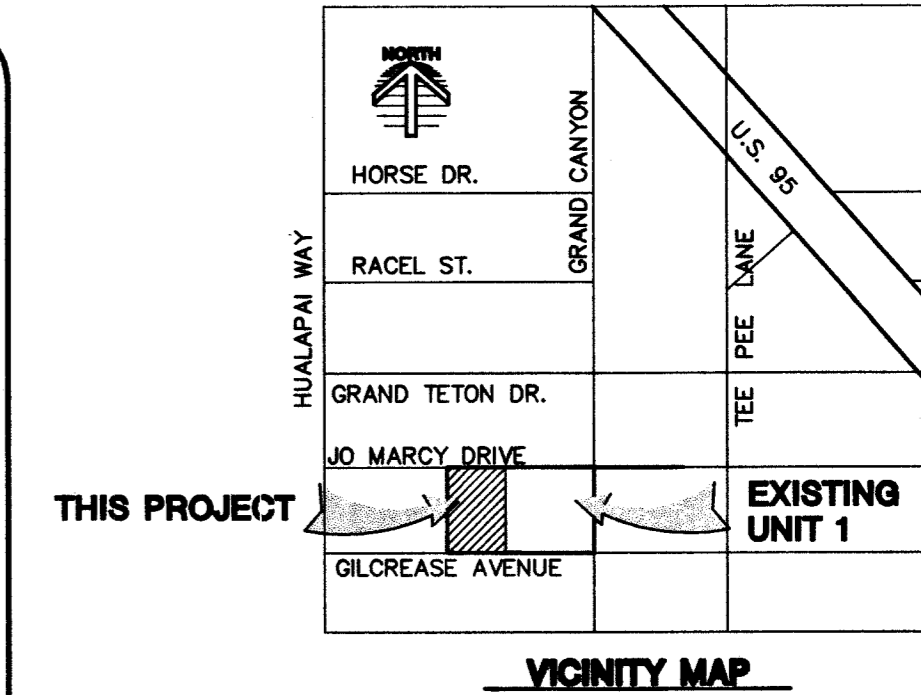
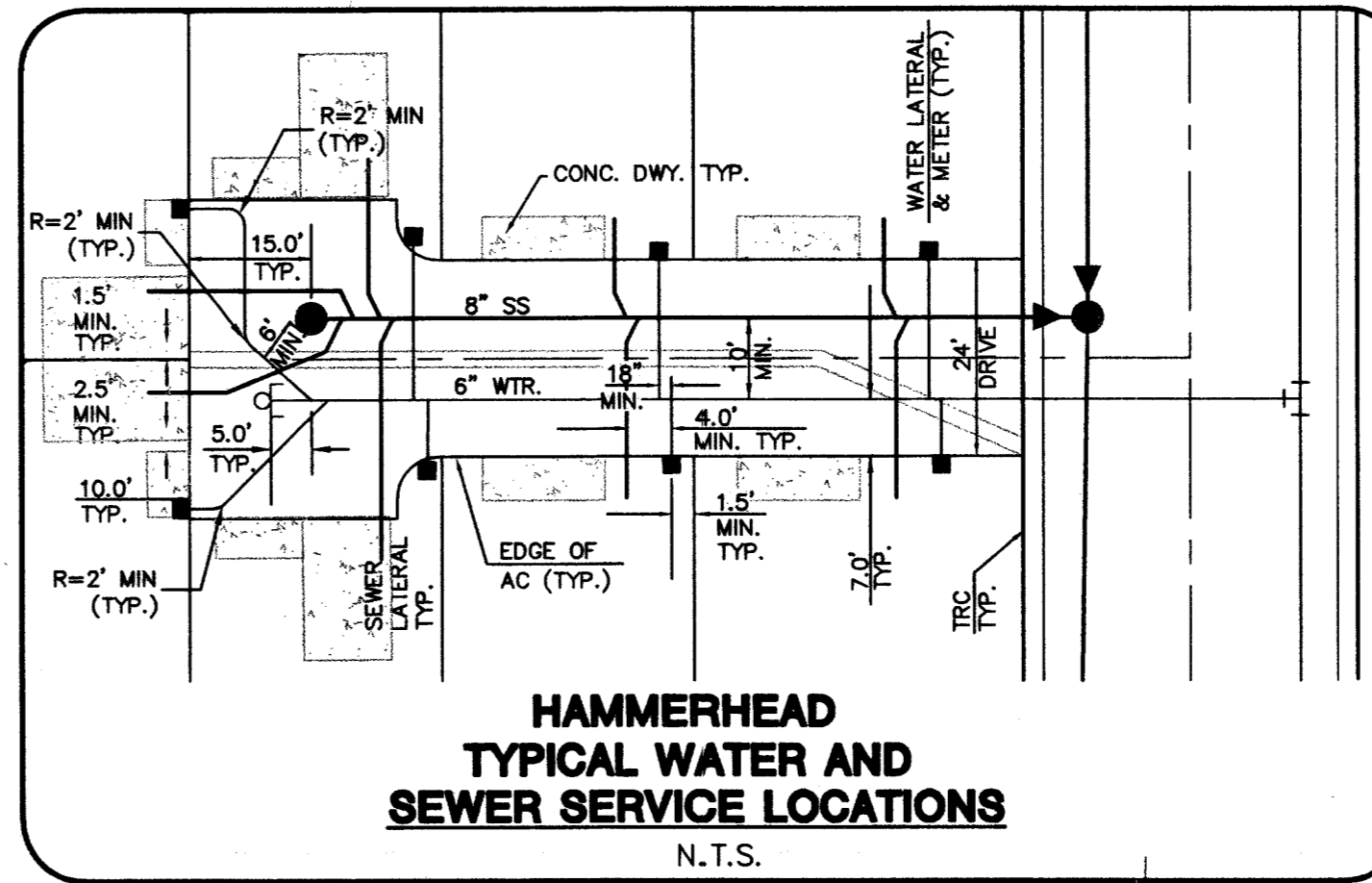
**SEWER CONTRIBUTION**  
AVERAGE FLOW 0.01925 MGD  
PEAK FLOW 0.067375 MGD

**BASIS OF BEARING**  
SOUTH 89°10'24" EAST - BEING THE SOUTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 18, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY THAT RECORD OF SURVEY ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 114 OF SURVEYS, AT PAGE 57.



**FIRE HYDRANT INSTALLATION**  
FIRE HYDRANT(S) TO BE INSTALLED IN ACCORDANCE WITH THE UDACS STANDARD PLATE NO. 7

**NOTE**  
SERVICE LATERAL FOR LOT 67 & 68 OF BLOCK A WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF LVWD.



**LINE TABLE - WATERLINES**

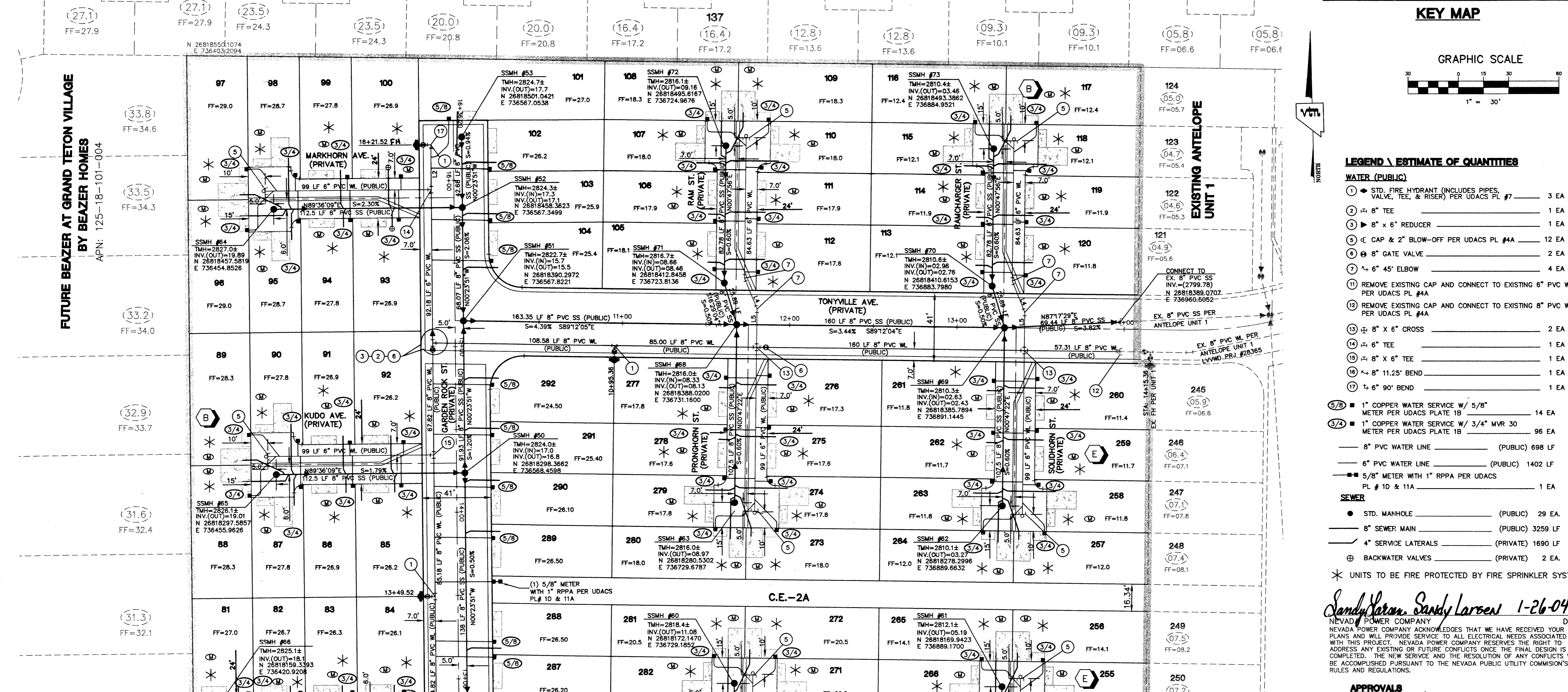
LINE	LENGTH
3" (PUBLIC) PVC WATERLINE LENGTHS	
L3	26.39 LF
6" (PUBLIC) PVC WATERLINE LENGTHS	
L4	20.09 LF
L5	22.81 LF
L1	5.00 LF
L2	27.00 LF

**NOTE**  
FOR LOTS 51-86 BLOCK A, 69-100, 105-120 BLOCK B, & 253-284 BLOCK E  
INSTALL ARMORCAST METER BOXES PART # A6000485 (METER BOX) PART # A6000484R (COVER)

**REDUCED PRESSURE PRINCIPLE ASSEMBLY (R.P.A.)**  
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. 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.

**FUTURE BEAZER AT GRAND TETON VILLAGE BY BEAZER HOMES**

APN: 125-18-101-004



**LEGEND / ESTIMATE OF QUANTITIES**

**WATER (PUBLIC)**

- 1 STD. FIRE HYDRANT (INCLUDES PIPES, VALVE, TEE, & RISER) PER UDACS PL #7 3 EA
- 2 8" TEE 1 EA
- 3 8" x 6" REDUCER 1 EA
- 4 CAP & 2" BLOW-OFF PER UDACS PL #4A 12 EA
- 5 8" GATE VALVE 2 EA
- 6 4" 45° ELBOW 4 EA
- 7 REMOVE EXISTING CAP AND CONNECT TO EXISTING 8" PVC WL PER UDACS PL #4A
- 8 REMOVE EXISTING CAP AND CONNECT TO EXISTING 8" PVC WL PER UDACS PL #4A
- 9 8" x 6" CROSS 2 EA
- 10 6" TEE 1 EA
- 11 8" x 6" TEE 1 EA
- 12 8" 11.25" BEND 1 EA
- 13 6" 90° BEND 1 EA

**SEWER**

- 1" COPPER WATER SERVICE W/ 5/8" METER PER UDACS PLATE 1B 14 EA
- 1" COPPER WATER SERVICE W/ 3/4" MVR 30 METER PER UDACS PLATE 1B 96 EA
- 8" PVC WATER LINE (PUBLIC) 698 LF
- 6" PVC WATER LINE (PUBLIC) 1402 LF
- 5/8" METER WITH 1" RPPA PER UDACS PL # 1D & 11A 1 EA
- STD. MANHOLE (PUBLIC) 29 EA
- 8" SEWER MAIN (PUBLIC) 3259 LF
- 4" SERVICE LATERALS (PRIVATE) 1690 LF
- BACKWATER VALVES (PRIVATE) 2 EA

\* UNITS TO BE FIRE PROTECTED BY FIRE SPRINKLER SYSTEM

**NOTE**  
ALL SEWER/STORM DRAIN CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.

**NOTE**  
FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.

**NOTE**  
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 27.

**WATER MAIN JOINT DEFLECTION (PVC, 4" - 24")**  
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1.150 FEET, PER UDACS 2.06.01 AND 2.06.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

**APPROVALS**  
City of Las Vegas Fire Marshal: *[Signature]* 1/29/04  
Sandy Larson, Sandy Larsen 1-26-04  
NEVADA POWER COMPANY: *[Signature]* 3/1/04

**GREYSTONE HOMES**  
CITY OF LAS VEGAS, NEVADA  
3765 E. SUNSET #B1  
LAS VEGAS, NEVADA 89120  
(702) 498-7700

**UTILITY PLAN**  
**ANTELOPE UNIT 2**

DESIGNED BY: AUG. 2003  
CHECKED BY: AUG. 2003  
PROJECT NO: 8588-2  
SCALE: 1" = 30' HORIZ. N/A VERT.

EXPIRES 06-30-04

**PROFESSIONAL ENGINEER STATE OF NEVADA**  
AARON M. MANCHUKA  
No. 15079

SHEET 5 OF 25 SHEETS  
DRAWING NO. 1674781-2