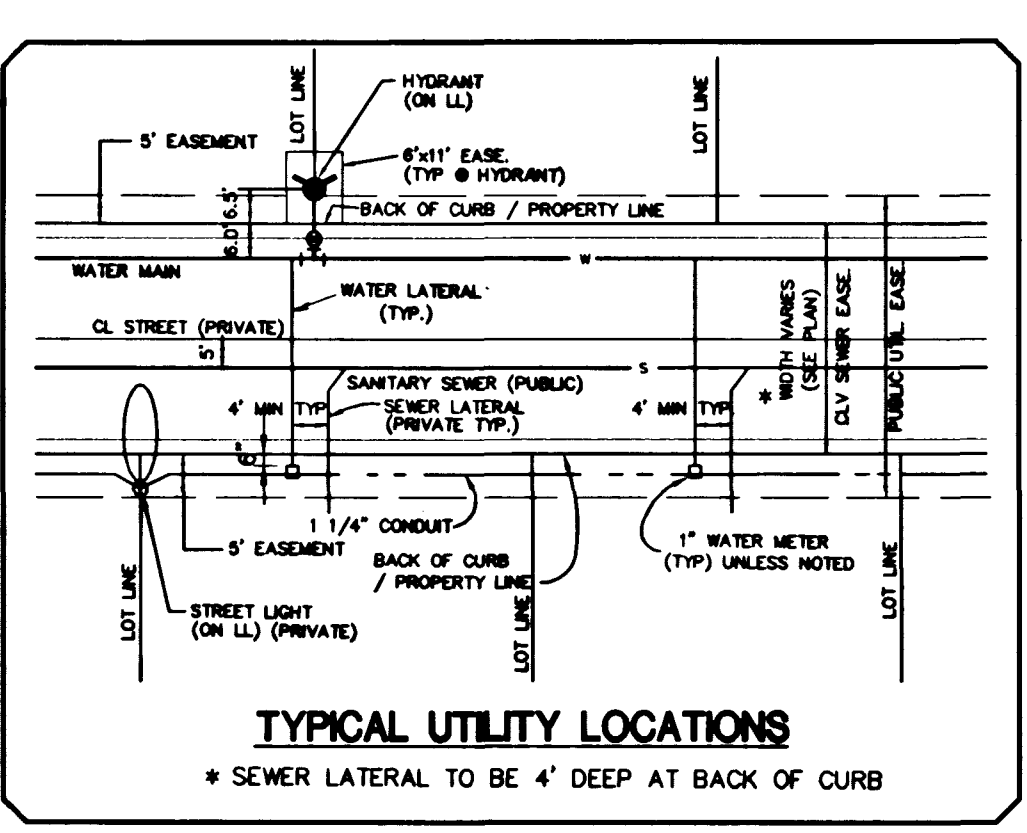
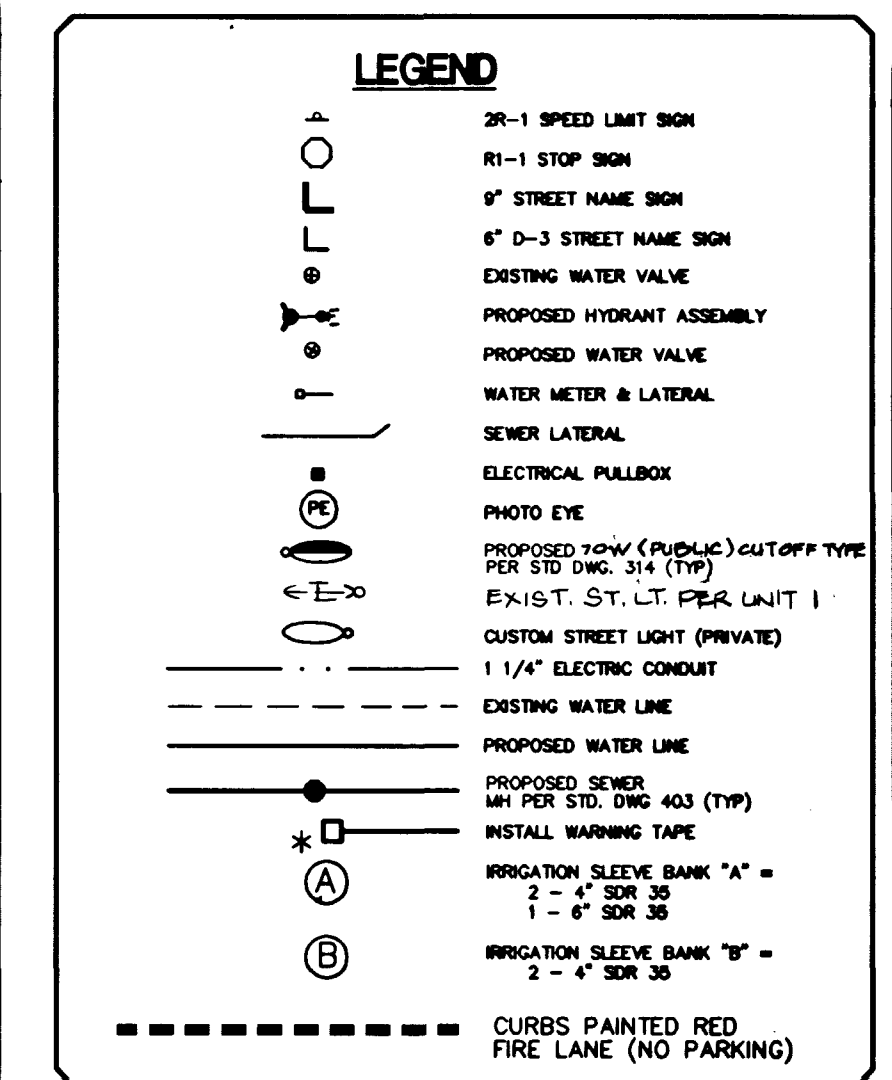




ESTIMATE OF WATER QUANTITIES

STD. F.H. W/6" G.V. & 6" LATERAL	3 EA
24" D.I.P. WATER MAIN (CL 250)	1256 LF
8" WATER MAIN	10 LF
6" WATER MAIN	37 LF
4" PVC WATER	140 LF
1" WATER SERVICES	17 EA
1" WATER METER (FROM LVVMD)	17 EA
METER BOX (UDACS PLATE 10)	17 EA
2" BLOW-OFF W/ CAP	3 EA
24" GATE VALVE	2 EA
1" RPPA	1 EA
24" 90° BEND	1 EA
24" 22 1/2° BEND	3 EA
24" 11 1/4° BEND	3 EA
24" 8" REDUCER	1 EA
24" TEE	1 EA
24" 6" TEE	4 EA
24" 4" TEE	1 EA

NOTE: THESE QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR SHALL VERIFY.

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVMD. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE LVVMD COMMUNICATION SUPPORT CENTER (928-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVMD INSPECTION.

2. ALL WORK SHALL CONFORM TO LVVMD STANDARD PLATES, DRAWING, AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.

3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA.

4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT, UNLESS OTHERWISE APPROVED BY THE LVVMD.

5. ALL SERVICE LATERALS TWO INCHES (2") IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.

6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.

7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, GUTTERS, CURBS AND ALLEY GUTTERS.

8. THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND A SANITARY SEWER OR STORM SEWER LINE CROSS:

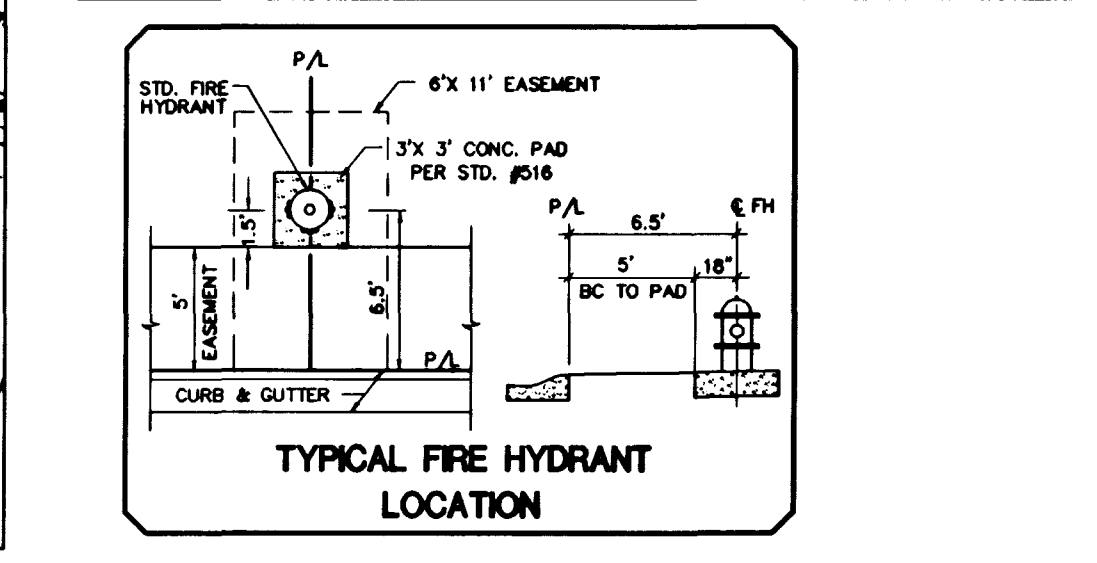
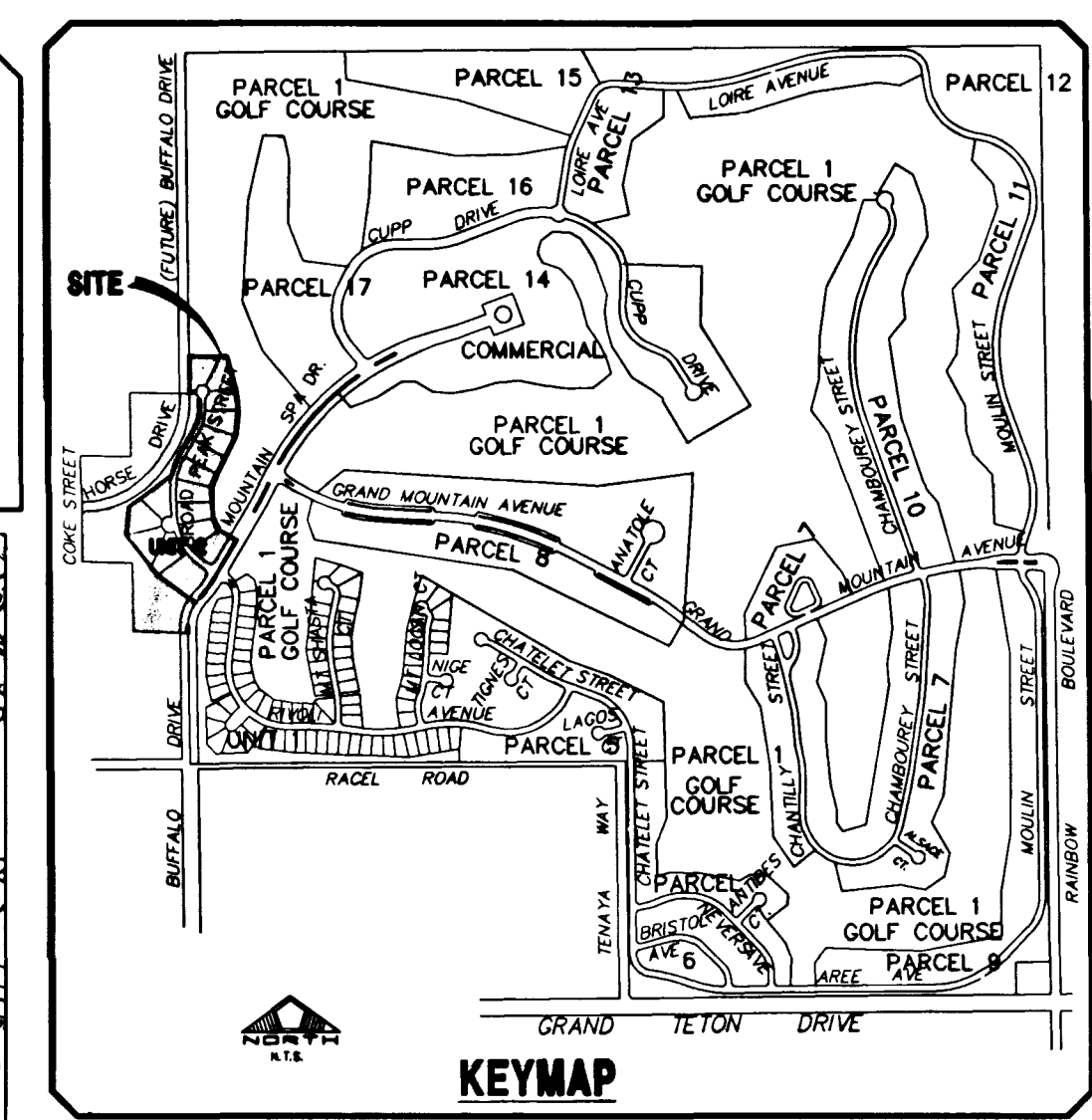
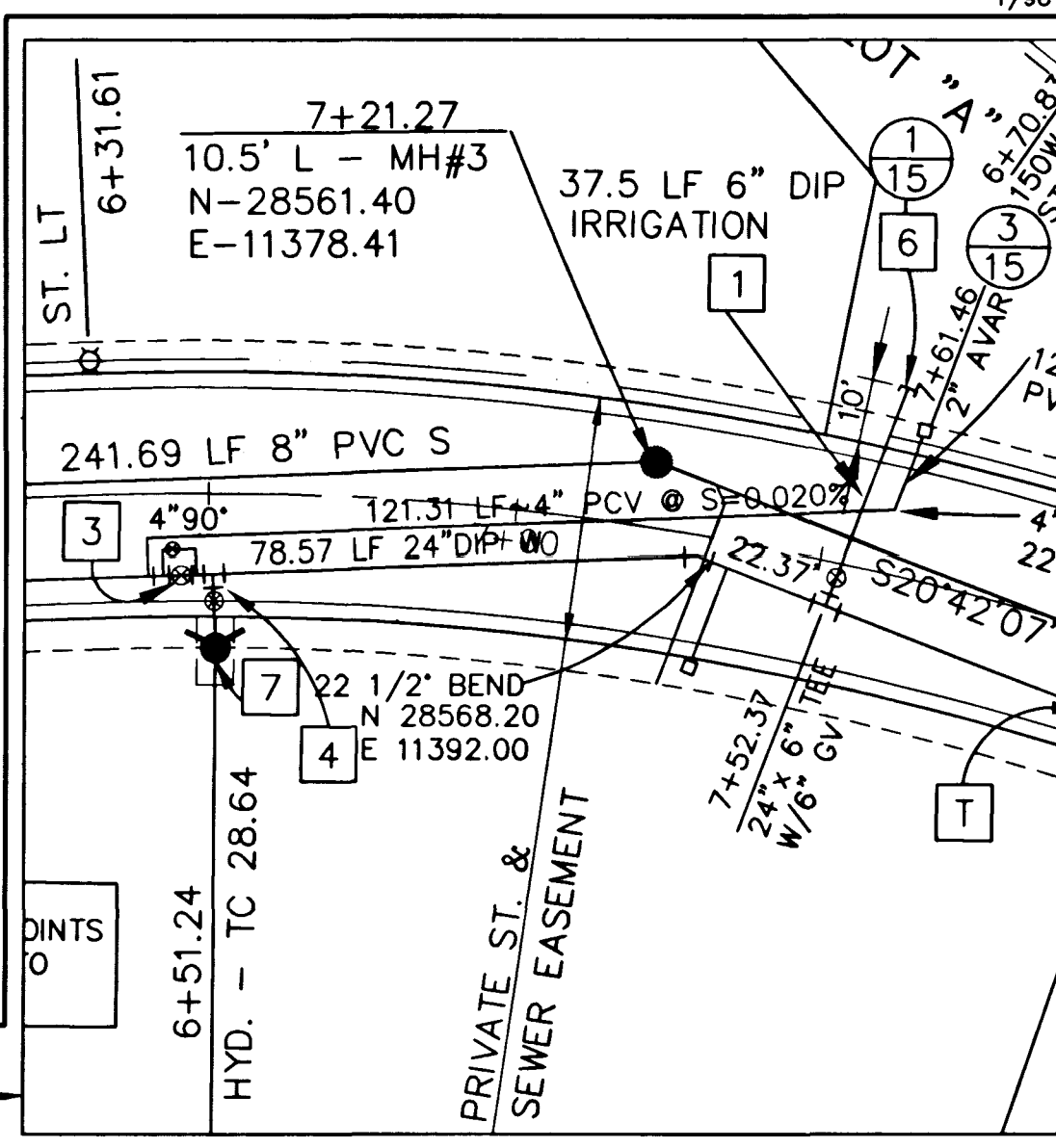
A. MINIMUM EIGHTEEN INCH (18") VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE UNDER BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:

A. POTABLE WATER SUPPLY QUALITY MATERIAL
B. ENCASEMENT WITH FOUR INCH (4") CONCRETE (MINIMUM)
C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.

EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE WATER MAIN, A MINIMUM TEN FOOT (10') DISTANCE PERPENDICULAR TO THE EXTERIOR OF MAIN.

9. WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX INCH (6") DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.

10. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO CONNECTION TO THE LVVMD'S DISTRIBUTION SYSTEM.



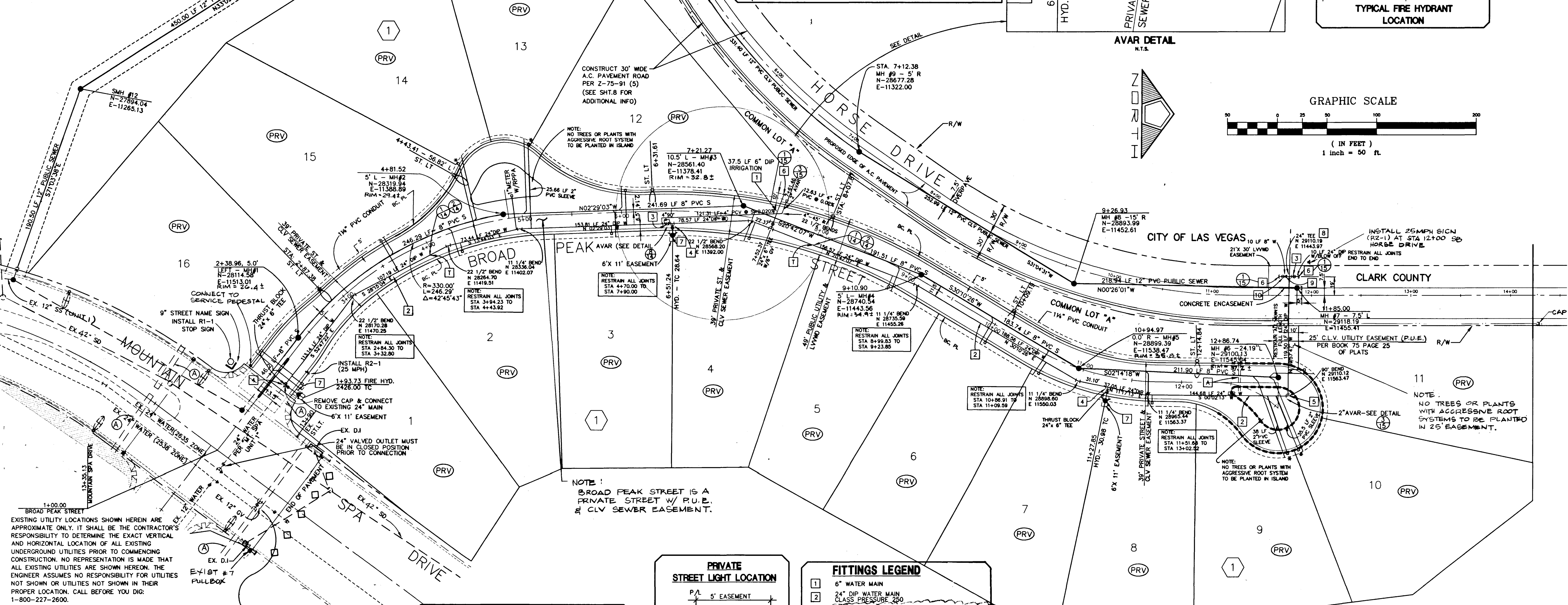
NOTES

1. ALL WATER PIPE TO BE C900 PVC UNLESS OTHERWISE NOTED ON THE PLANS.

2. GATE VALVES SHALL NOT BE LOCATED IN STREET GUTTERS, VALLEY GUTTERS, OR IN DRIVEWAYS, PER "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS", 1996, ITEM #2.06.01.

3. * TRACER WIRE REQUIRED ON ALL LATERALS NOT PERPENDICULAR TO MAINS (TYP.).

4. WATER METER LOCATION IS NOT ALLOWED UNDER DRIVEWAY. AVOID SEWER LATERALS UNDER DRIVEWAY WHERE POSSIBLE.



Call before you Dig.

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

Call before you OVERHEAD

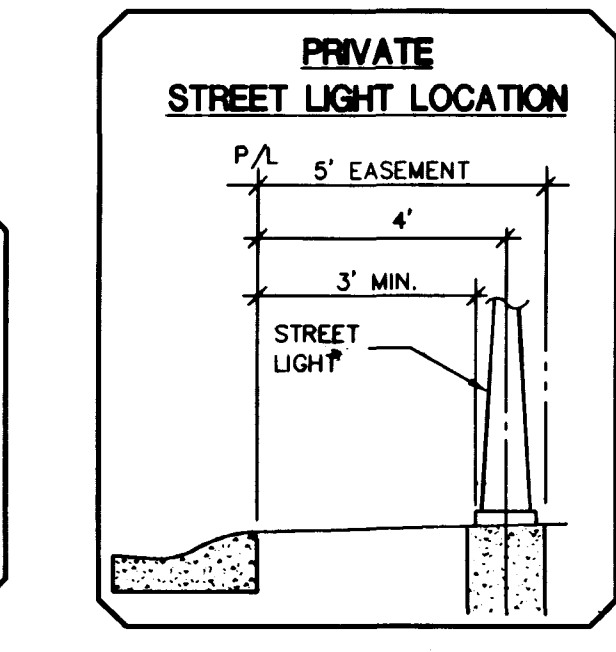
1-702-593-6111
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

UNIT 2 WILL ULTIMATELY BE SERVED FROM THE 2635 ZONE PIPELINE AND TEMPORARILY BE SERVED FROM THE 2538 ZONE. UPON CONNECTION TO THE 2635 ZONE, THIS VALVE WILL BE CLOSED.

TRAFFIC & STREET LIGHT QUANTITIES

ONSITE (PRIVATE)

9" METRO STREET NAME SIGN/STOP SIGN	1 EA
12" METRO STREET NAME SIGN/STOP SIGN	1 EA
CUSTOM STREET LIGHT (PRIVATE)	6 EA
1-1/4" STREET LIGHT CONDUIT & WIRE	1093 LF

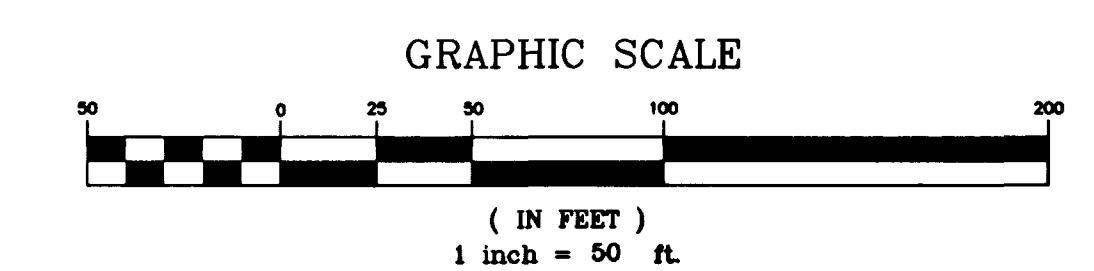


FITTINGS LEGEND

1	6" WATER MAIN
2	24" DIP WATER MAIN CLASS PRESSURE 250
3	24" RESILIENT SEAT G.V. METROSEAL BY U.S. PIPE CLASS 250 (OR APPROVED EQUAL)
4	24" 6" TEE
5	24" 90° BEND
6	2" BLOW-OFF ASSEMBLY W/ CAP
7	STD. FIRE HYDRANT ASSEMBLY (UDACS PLATE #7)
8	24" TEE
9	24" 8" REDUCER
10	8" GATE VALVE

NOTE

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. PRV's are the Developer's responsibility and will not be inspected or included in the acceptance of LVVMD facilities.



LAS VEGAS VALLEY WATER DISTRICT

DATE: 1/29/99

CITY FIRE MARSHALL

MOUNTAIN SPA RESIDENTIAL DEVELOPMENT, LLC
2810 WEST CHARLESTON, F-58
LAS VEGAS, NV. 89146
(702) 870-1234

PENTACORE
CIVIL ENGINEERING & ARCHITECTURE
6763 WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89146 (702) 258-0115

UTILITY PLAN AND SHEET INDEX

MOUNTAIN SPA UNIT NO. 2

DATE: JAN. 99
DRAWN BY: LG
DESIGNED BY: JG
CHECKED BY: JG
ADA CHECKED: JG
JOB NO.: 0156-0200
SCALE: 1" = 50'

PROFESSIONAL ENGINEER - STATE OF NEVADA
SAMM ALWAY
1-26-99
NO. 10502

SHEET **3** OF 15
C.L.V. DWG. #307Y-4394-2

