

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

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

ALL SEWER/STORM DRAINS CROSSINGS 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 CROSSINGS AND CLEARANCES.

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 LVVMD.

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.

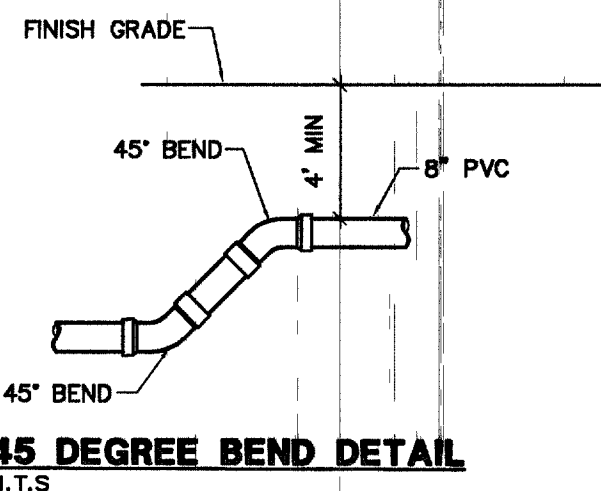
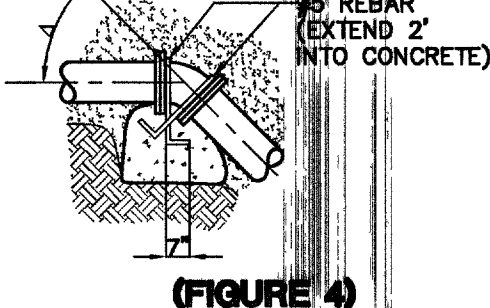
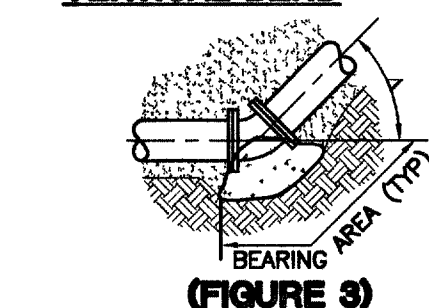
EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

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

PRIVATE STREETS AND PRIVATE DRIVES
ARE P.U.E.S C.L.V. PUBLIC SEWER EASEMENTS, AND PUBLIC
DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

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. PRVS ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.

THRUST BLOCK INSTALLATION
N.T.S. USD PLATE NO. 5 PL11-1



Avoid overhead power line contact. It's costly.

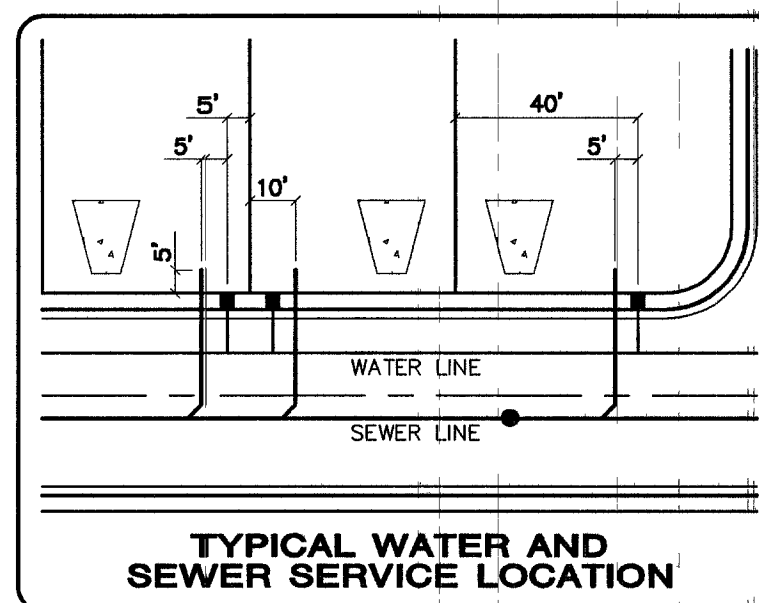
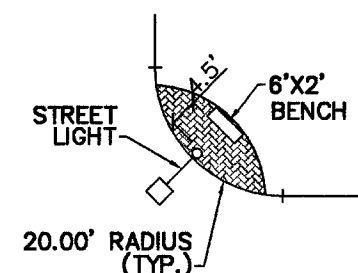
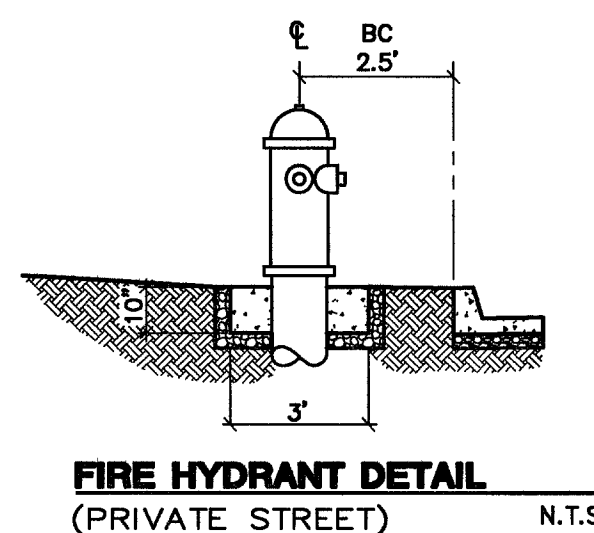
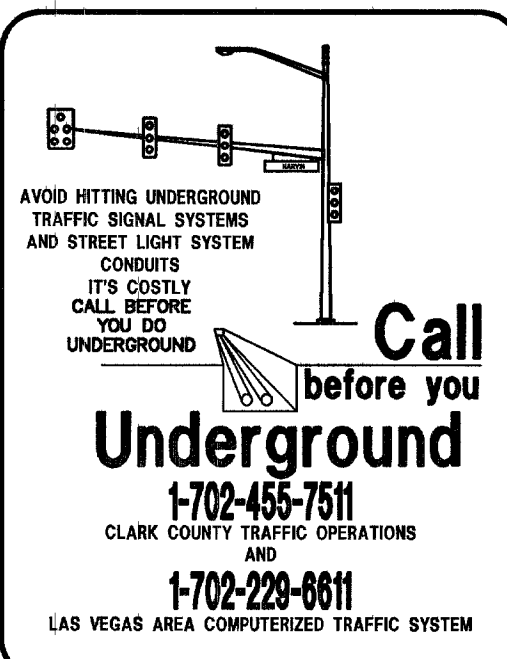
**Call
before you
Overhead**

1-702-227-2929

Avoid cutting underground utility lines. It's costly.

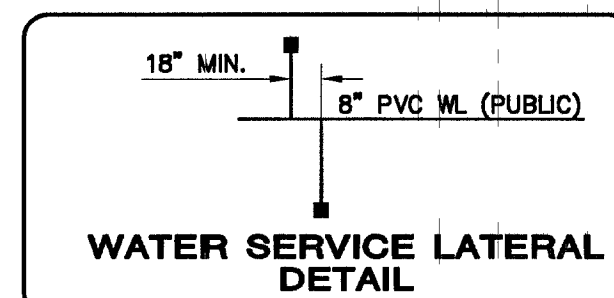
**Call
before you
Dig**

1-800-227-2800



DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88B)
CITY OF LAS VEGAS BENCHMARK: BLV99-13SE
NAV88B ELEVATION: 869.608 METERS (2853.03 FEET)
RIVET AND PLATE IN CONCRETE CYLINDER NW CORNER OF HUALAPAI AND ELKHORN
NOTE: WHEN THE SURVEYING FOR THIS PROJECT BEGAN, THE ABOVE REFERENCED BENCHMARK BLV99-13SE WAS NOT PUBLISHED. THE BASIS FOR THE DATUM FOR THIS PROJECT IS SHOWN ON RECORD OF SURVEY FILE 124 PAGE 94, CLARK COUNTY BENCHMARK 1000-BNS, WHICH AT THE TIME OF THE ORIGINAL SURVEY (PUBLISHED APPROX. 2011) WAS 2584.61 FEET ABOVE THE MEAN SEA LEVEL. HAD AN ELEVATION OF 2584.61 FEET TO CONVERT THE CURRENT CITY OF LAS VEGAS BENCHMARK BLV99-13SE TO MATCH THE ORIGINAL SURVEYING, 0.34' WOULD BE ADDED TO THE ELEVATION OF 2853.03 FEET.

THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 00°08'16" EAST BEING THE EAST LINE OF THE NORTHWEST QUARTER (NE 1/4) OF THE SECTION 24, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 123 AT PAGE 32.



**LAS VEGAS VALLEY WATER DISTRICT
(LVVWD) STANDARD NOTES**

SSNH	NORTHING	EASTING	TMH	INV. IN	INV. OUT
1 T-LOOK	26812594.1158	731236.3391	2983.8%	2969.55	2969.35
2	26812591.2353	731185.8905	2987.7%	2973.80	2973.61
3	26812613.2075	731136.7368	2989.5%	2978.31	2978.10
4	26812605.9271	730785.6717	3000.6%	2993.60	2993.40
5	26812739.0975	730780.9733	3002.3%	N/A	2998.30
6	26812688.7575	730636.7651	2998.5%	2988.60	2988.40
7	26812765.0065	731148.0411	2990.1%	2983.10	2982.90
8	2681182.4643	731147.0580	2990.9%	2983.90	2983.70
9	26812607.3672	730915.5701	2996.4%	2990.40	2990.20
10	26812780.8146	730789.1636	3000.5%	2994.50	2994.30
11	26812870.0665	730666.1074	3008.9%	3000.10	2999.90
12	26812868.1200	730667.3401	3011.6%	3004.35	3004.15
13	26812817.3556	730640.1893	3012.3%	3004.34	3004.14
14	26812775.2114	730463.2053	3011.8%	3004.80	3004.60
15	26812596.8189	730487.0530	3014.6%	3007.60	3007.40
16	26812597.4206	730135.9593	3012.8%	3014.58	3014.38
17	26812510.1242	730133.6432	3015.6%	N/A	3005.31
18 T-LOOK	26812791.2071	730363.0951	3019.8%	3005.61	3005.41
19	26812786.4273	730132.4340	3025.1%	3019.46	3019.26
20	26812907.2871	730153.7632	3026.4%	N/A	3020.20
21	26813010.7399	731014.8126	2994.8%	2987.85	2987.65
22	26813010.6791	731226.0381	2995.2%	N/A	2988.58
23	26813011.7285	730900.7883	2995.6%	2983.60	2983.40
24	26813076.4344	730592.0894	3008.8%	3001.80	3001.60
25	26813076.4344	730541.0213	3013.1%	3006.90	3006.70
26	26812997.5004	730305.2191	3021.8%	3014.80	3014.60
26A	26812993.5810	730178.2613	3025.0%	3018.20	3018.00
27	26812998.6252	730107.7215	3026.3%	N/A	3018.60
27A	26812998.6252	730139.3939	3026.3%	3018.60	3018.40
28	26813096.0122	731027.1438	2995.5%	N/A	2988.37

LYVWD PROJECT # 111525

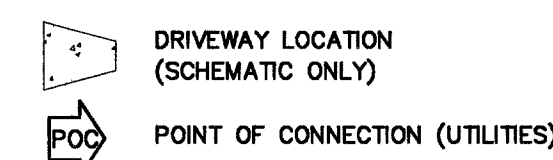
1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATIONS SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2003 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS).
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSING SHALL CONFORM TO SECTION 2.19 OF THE 2003 EDITION OF THE UDACS.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METER TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOW. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT 1-800-227-2800.

WATER PUBLIC

- | | | |
|---|---|--------------|
| ① | ◆ FIRE HYDRANT ASSEMBLY (INCLUDES
8"X6" TEE #8"GV) PER UDACS PLT. 7..... | 12 EA. |
| ② | 6" GATE VALVE PER UDACS PLT. 3..... | 1 EA. |
| ③ | 6" TEE PER UDACS PLT. 5..... | 0 EA. |
| ④ | 8"X6" TEE PER UDACS PLT. 5..... | 2 EA. |
| ⑤ | 8"x 8" CROSS PER UDACS PLT. 5..... | 3 EA. |
| ⑥ | 90° ELBOW PER UDACS PLT. 5..... | 21 EA. |
| ⑦ | 8" GATE VALVE PER UDACS PLTS. 3 & 8..... | 2 EA. |
| ⑧ | 8" TEE PER UDACS PLT. 5..... | 9 EA. |
| ⑨ | CAP ONLY..... | 1 EA. |
| ⑩ | CAP W/ 2" B.O PER UDACS PLT. 4A..... | 0 EA. |
| ⑪ | 8" 90° BEND PER UDACS PLT. 5..... | 0 EA. |
| ⑫ | 8" 45° BEND PER UDACS PLT. 5..... | 13 EA. |
| ⑬ | 8"-22 1/2" BEND PER UDACS PLT. 5..... | 8 EA. |
| ⑭ | 8"-11 1/4" BEND PER UDACS PLT. 5..... | 26 EA. |
| ⑮ | 8" 5" BEND RESTRAINING BOTH ENDS..... | 2 EA. |
| ⑯ | 8"-22 1/2" BEND PER UDACS PLT. 3..... | 2 EA. |
| ⑰ | 8"X6" REDUCER PER UDACS PLT. 3..... | 2 EA. |
| ⑱ | 1" IRRIGATION METER PER
UDACS PLATE 1-D W/1" RPPA PER
UDACS PLATE 11-A..... | 1 EA. |
| ⑲ | W/ 3/4" METER (UDACS PLATE 1B)..... | 136 EA. |
| ⑳ | BACK WATER VALVE (PRIVATE)..... | 80 EA. |
| ㉑ | 6" WATER MAIN (PUBLIC)..... | 291.67 LF. |
| ㉒ | 8" WATER MAIN (PUBLIC)..... | 5,300.61 LF. |
| ㉓ | 8" WATER MAIN D.I.P. (PUBLIC)..... | 48.40 LF. |

●	STANDARD MANHOLE (PUBLIC).....	30 EA.
—	4" SEWER LATERALS (PRIVATE).....	3589.43 LF.
(—)	4" SEWER WYES (PUBLIC).....	136 EA.
	8" SEWER MAIN (PUBLIC).....	4248.97 LF.

AVERAGE DAILY FLOW =	0.034	MGD
PEAK FLOW =	0.119	MGD



CONSTRUCTION NOTES:

1. CONCRETE COLLARS TO BE CLASS "A" CONCRETE PER SECTION 501.03.04 OF "UNIFORM STANDARD SPECIFICATION, CLARK COUNTY AREA, NEVADA.
2. INSTALL ONE #3 REBAR ALL AROUND IF REQUIRED BY THE APPLICABLE UTILITY OR AGENCY.
3. CONCRETE COLLARS SHALL BE INSTALLED TO MIN. DIMENSIONS SHOWN HEREON UNLESS OTHERWISE DELINEATED BY STANDARDS ESTABLISHED BY THE APPLICABLE UTILITY OR AGENCY.
4. BASE AND BACKFILL WITHIN THE "COMPACTION ZONE" DELINEATED HEREON SHALL BE TYPE OR SUITABLE ON-SITE MATERIALS COMPACTED TO 95% MAXIMUM RELATIVE DENSITY.

LAS VEGAS VALLEY WATER DISTRICT (PROJECT #111525) DATE

CITY OF LAS VEGAS FIRE MARSHAL 10/18/05 DATE _____

Donna Bruce 10/19/05

NEVADA POWER COMPANY DATE _____

NEVADA POWER COMPANY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NEVADA POWER COMPANY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE
AT 20 psi RESIDUAL PRESSURE.

BASED ON:

SQUARE FOOTAGE: <3600 SQ. FT.
LARGEST AREA BETWEEN
4-HOUR AREA SEPARATION
WALLS: <3600 SQ. FT.
BUILDING HEIGHT: - FEET
NUMBER OF STORIES: 2
TYPE OF CONSTRUCTION: V-NR
OCCUPANCY: SFR
FULL AUTOMATIC FIRE
SPRINKLER SYSTEM: N/A

REVIEWED BY: [Signature]
DATE: 12/18/05

KIMBALL HILL
8 SUNSET WAY, SUITE 101
HENDERSON, NEVADA 89014
(702) 735-1100

UTILITY NOTES AND DETAILS SHEET

**WINDIMERE @
PROVIDENCE / CLIFFS EDGE
POD 211 - UNIT 1**

DRAWN BY:	10/05
DESIGNED BY:	10/05
CHECKED BY:	10/05
PROJECT NO:	SCALE: 1"=30' HORIZ 1"=4' VERT

PROFESSIONAL ENGINEER - SKILL

CHRISTOPHER J. GRUBBS
CIVIL
 EXPIRES 06-30-07

SHEET
UT7
 10 of 52 SHEETS
 DRAWING NO.
10744888-1