

**DISCLAIMER NOTE:**

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD 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. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Avoid overhead power line contact. It's costly.

**Call before you Overhead**  
1-702-227-2929  
Nevada Power  
Environment and Safety Services Department

Call before you Dig  
Avoid existing underground utility lines. It's costly.

**Call before you Dig**  
1-800-227-2600  
CLARK COUNTY TRAFFIC OPERATIONS  
1-702-455-6000

**LEGAL DESCRIPTION**

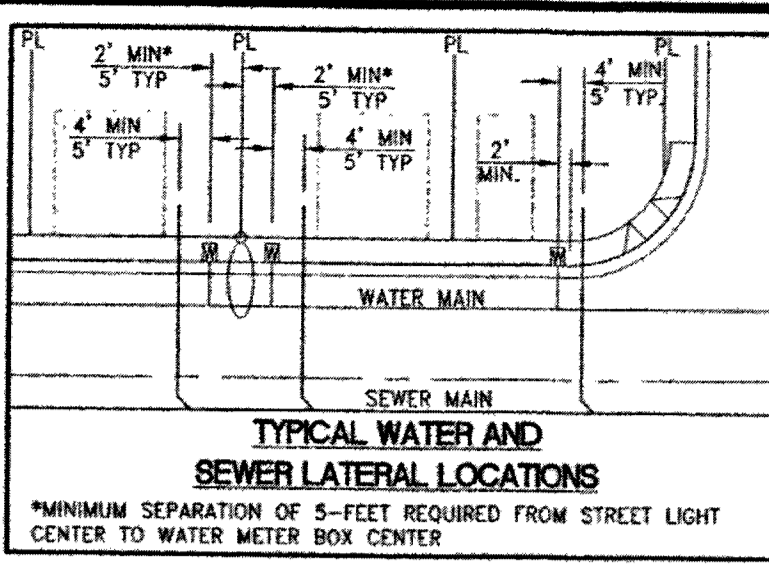
ALL OF PARCEL 0 AS SHOWN ON THE FINAL MAP OF SUMMERLIN VILLAGE 239, UNIT No. 2 ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA IN BOOK 145 OF PLATS AT PAGE 83, SITUATE IN SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK STATION 5LV09 34NE6  
RIVET AND PLATE IN TOP OF CURB AT THE NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE.  
ELEVATION = 1007.197 METERS (NAV'D/88)  
ELEVATION = 3304.45 US SURVEY FEET (NAV'D/88)

**BASIS OF BEARINGS**

NORTH 89°46'49" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.



**BACKWATER VALVE**

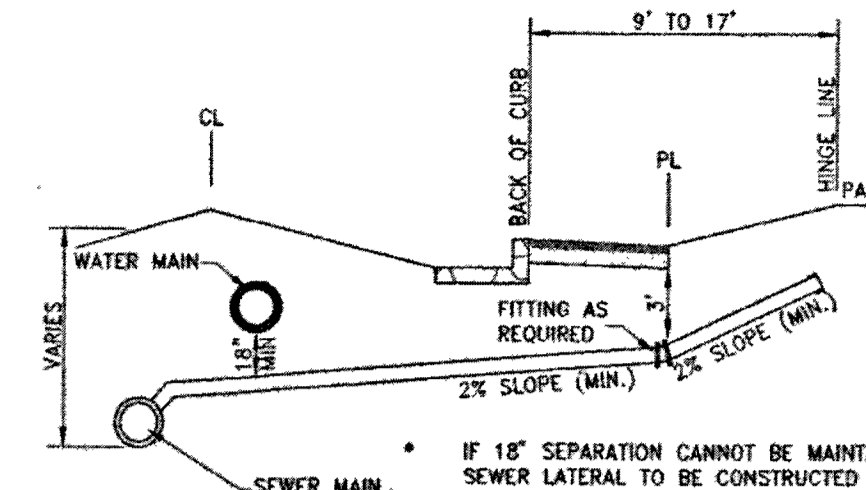
ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

**PRESSURE REDUCING VALVE NOTE**

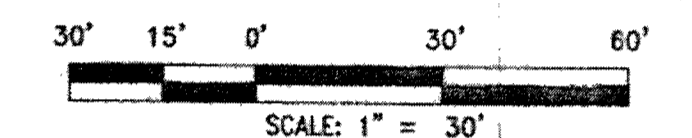
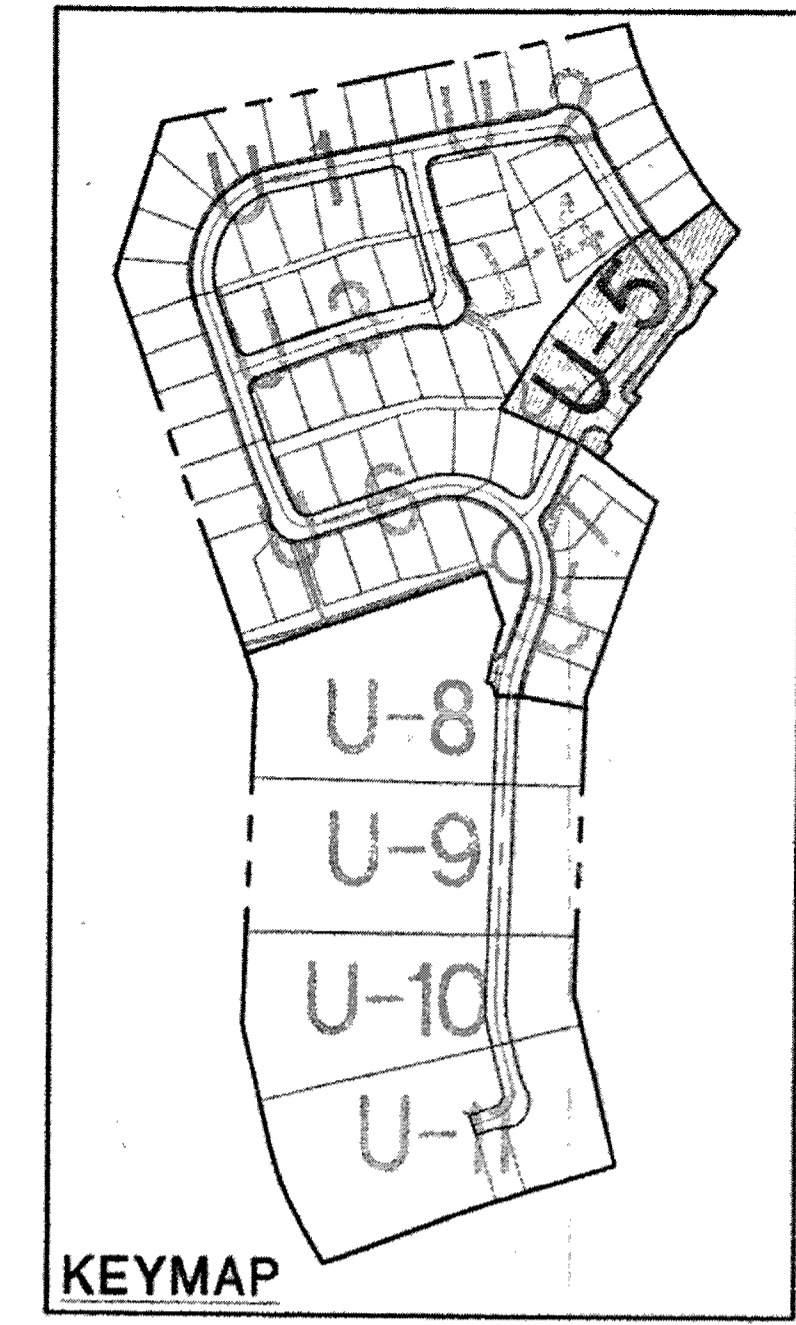
NO LOTS IN THIS PROJECT REQUIRE ON-SITE PRIVATE PRESSURE REDUCING VALVES.

**NOTES:**

- SEE DCSWCS SD-22 & SD-23 FOR SEWER LATERALS.
- CURB SHALL BE STAMPED WITH AN "S" PER DCSWCS SD-25.
- SEPARATION FROM WATER MAIN TO BE IN COMPLIANCE WITH UDACS SECTION 2.22.03.



IF 18" SEPARATION CANNOT BE MAINTAINED, THE ENTIRE SEWER LATERAL TO BE CONSTRUCTED WITH C900 WATER QUALITY MATERIALS AND MINIMUM SEPARATION OF 6" BETWEEN THE SEWER LATERAL AND WATER MAIN MUST BE MAINTAINED.



**REDUCING PRESSURE PRINCIPLE ASSEMBLY (3) 1'**  
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENTS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

**WASTEWATER FLOW CALCULATION**  
CALCULATIONS:  
66 ERU (66 LOTS) \* 250 GPD = 0.0165 MGD  
= 0.0165 \* 3.5 = 0.05775 MGD PEAK

- WATER CONSTRUCTION NOTES**
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 39 & 40 (INCLUDES 8" GATE VALVE)
  - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2
  - INSTALL 8" GATE VALVE PER UDACS PLATE NO. 30 & NO. 39
  - INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
  - INSTALL 8" X 8" TEE PER UDACS PLATE NO. 31
  - INSTALL 8" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
  - INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
  - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" BRPA PER UDACS PLATE NO.'S 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND BRPA)
  - INSTALL 1" COPPER SERVICE LATERAL WITH 5/8" WATER METER (FOR IRRIGATION) WITH 1" BRPA PER UDACS PLATE NO.'S 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND BRPA)
  - INSTALL 8" 5' BEND PER UDACS PLATE NO. 31
  - INSTALL 8" 11.25' BEND PER UDACS PLATE NO. 31
  - INSTALL 8" 22.5' BEND PER UDACS PLATE NO. 31
  - INSTALL 8" 45' BEND PER UDACS PLATE NO. 31
  - INSTALL 8" 90' BEND PER UDACS PLATE NO. 31
  - REMOVE EX CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
  - INSTALL STEEL SLEEVE PER UDACS PLATE NO. 23

- SEWER CONSTRUCTION NOTES**
- INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-1A, SD-1B, SD-4, SD-5 & SD-6)
  - (TYP) INSTALL 4" SEWER LATERAL (PER DCSWCS STD NO. SD-17, SD-22 & SD-25)
  - TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
  - INSTALL 8" SEWER CAP AND 1 CU-FT THRUST BLOCK @ CAP

**EXISTING UTILITY NOTE:**  
1. EXISTING UTILITIES AS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY BOTH VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN INCORRECTLY OR OTHERWISE NOT SHOWN.

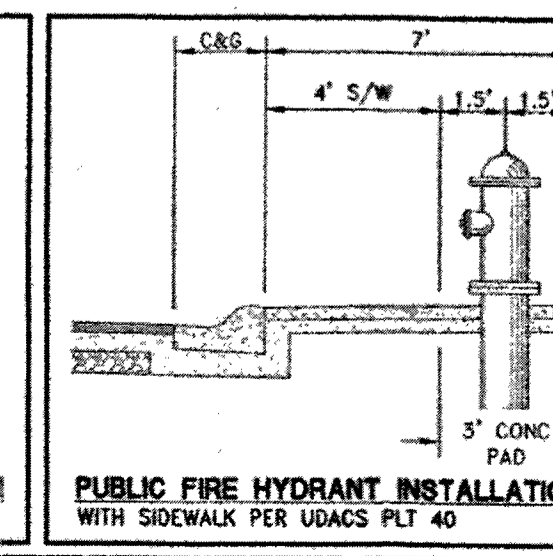
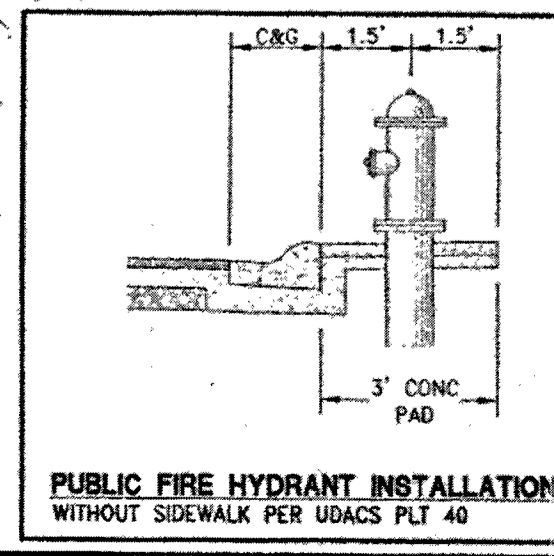
**CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL**  
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD.  
FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

**APPROVED FOR CONSTRUCTION**  
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER  
DATE: 03/10/15 PROJECT: 123421  
LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

**BUILDING INFORMATION**  
TYPE OF CONSTRUCTION: V-8  
TOTAL LIVING AREA: < 4,487 S.F.  
TOTAL SF UNDER ROOF: < 5,317 S.F.  
NUMBER OF STORIES: 2  
BUILDING USE: SINGLE FAMILY RESIDENTIAL  
SPRINKLER: NO  
NUMBER OF FIRE HYDRANTS: 10  
FIRE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

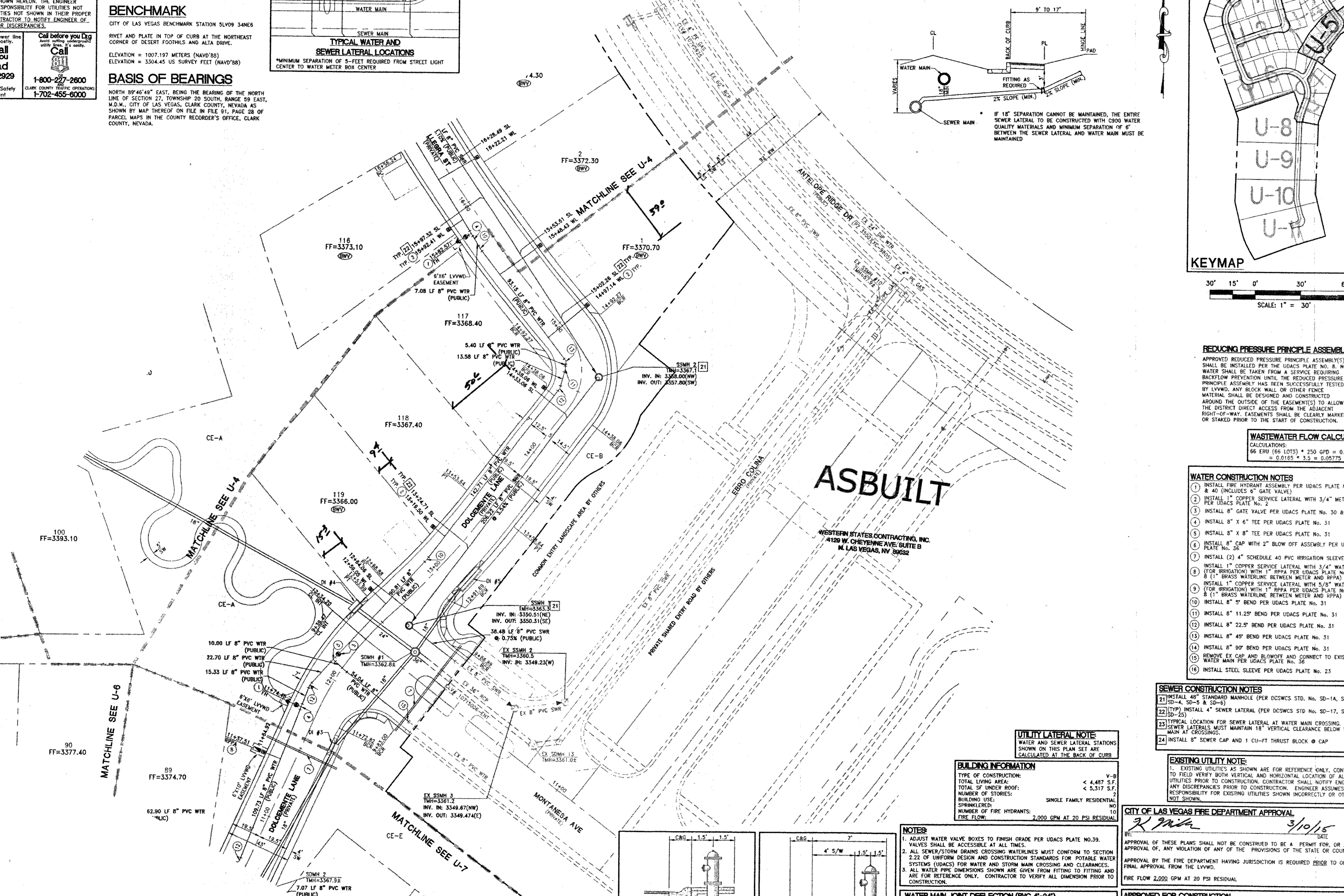
- NOTES:**
- ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO.39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.
  - ALL SEWER/STORM DRAINS CROSSING WATERLINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.
  - ALL WATER PIPE DIMENSIONS SHOWN ARE GIVEN FROM FITTING TO FITTING AND ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL DIMENSION PRIOR TO CONSTRUCTION.

**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 2.07.01 AND 2.07.02  
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.  
**NOTE:**  
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15



**PUBLIC FIRE HYDRANT INSTALLATION WITHOUT SIDEWALK PER UDACS PLAT 40**

**PUBLIC FIRE HYDRANT INSTALLATION WITH SIDEWALK PER UDACS PLAT 40**



**TOLL SOUTH LV, LLC**  
1140 LAS VEGAS BLVD, SUITE 250  
LAS VEGAS, NV 89102  
PHONE: 702-541-9800 FAX: 702-241-9810

**Engineering ASBUILTRCI**  
4325 Dean Martin Drive Suite 300, Las Vegas, NV 89103  
PH: 702-653-0800 FAX: 702-653-0801

**ALURA UNIT 1 A SINGLE FAMILY RESIDENTIAL SUBDIVISION ASBUILT RCI UTILITY PLAN (SHEET 5 OF 11)**

DATE: March 05, 2015  
SCALE: 1"=30'  
DRAWN BY: CS  
CHECKED BY: JAT  
APPROVED BY: JAT  
PROJECT #: 11090208

**APPROVED FOR CONSTRUCTION**  
3/10/15  
3/10/15

**U-5**  
SHT 21 OF 47  
DRAWING NUMBER 101715034  
WAS 57695