

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. If a conflict exists, call before you dig.

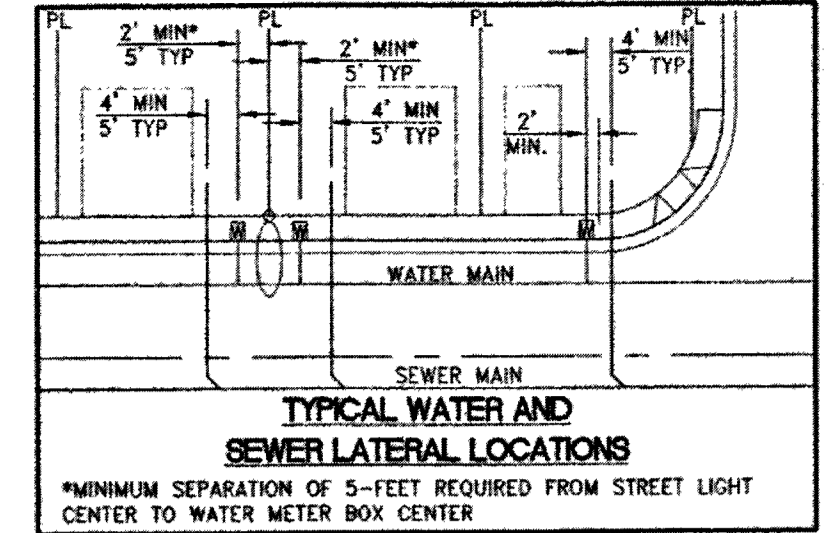
Call before you dig
 1-800-227-2600
 Nevada Power
 Environment and Safety Services Department

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

LEGAL DESCRIPTION
 ALL OF PARCEL Q AS SHOWN ON THE FINAL MAP OF SUMMERLIN VILLAGE 23B, 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 (NAVD'88)
 ELEVATION = 3304.45 US SURVEY FEET (NAVD'88)

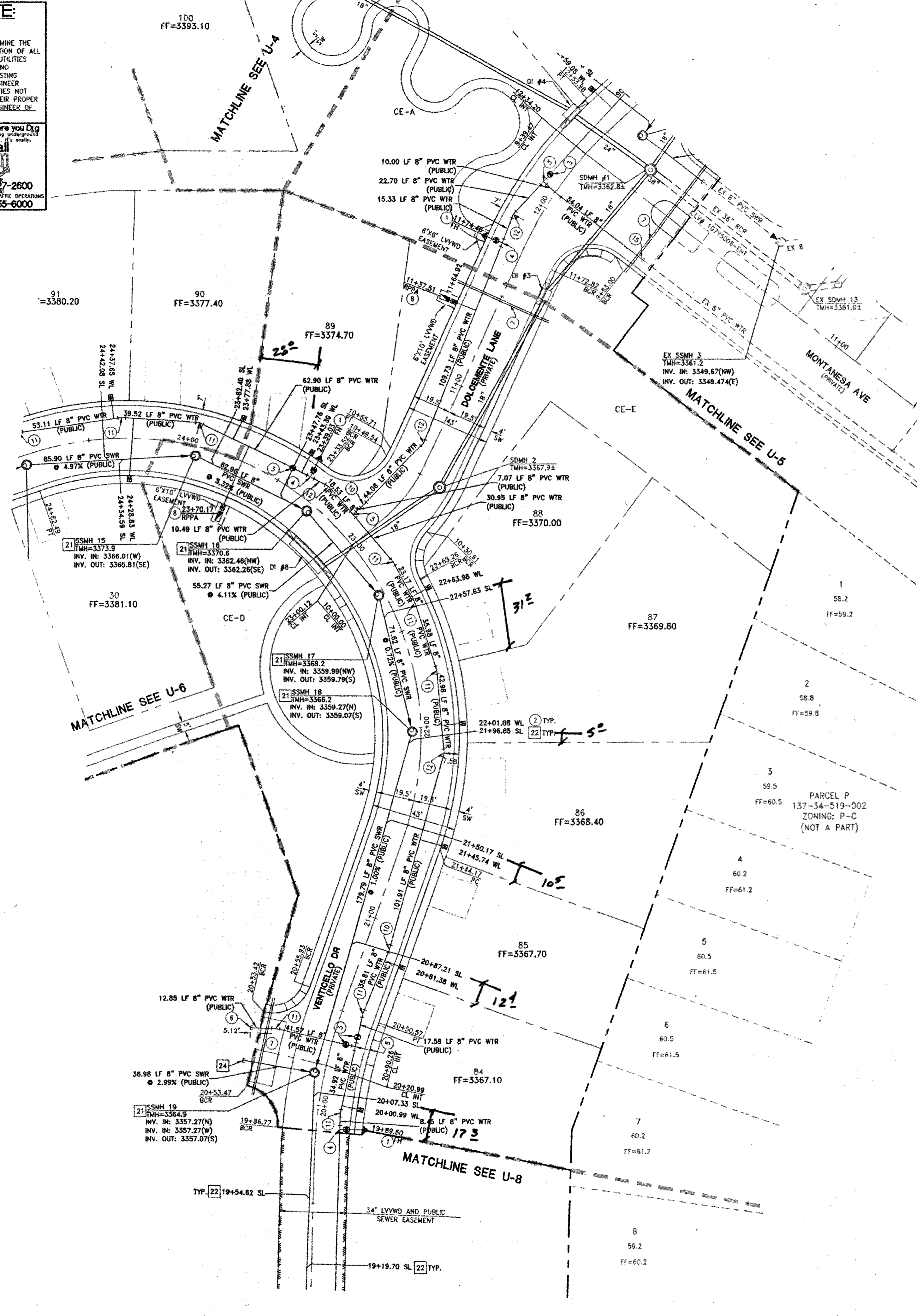
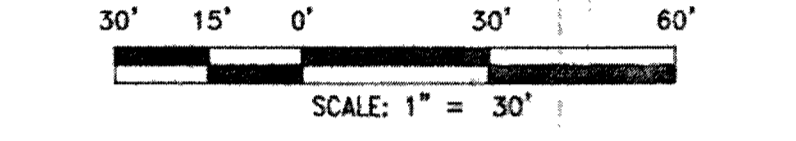
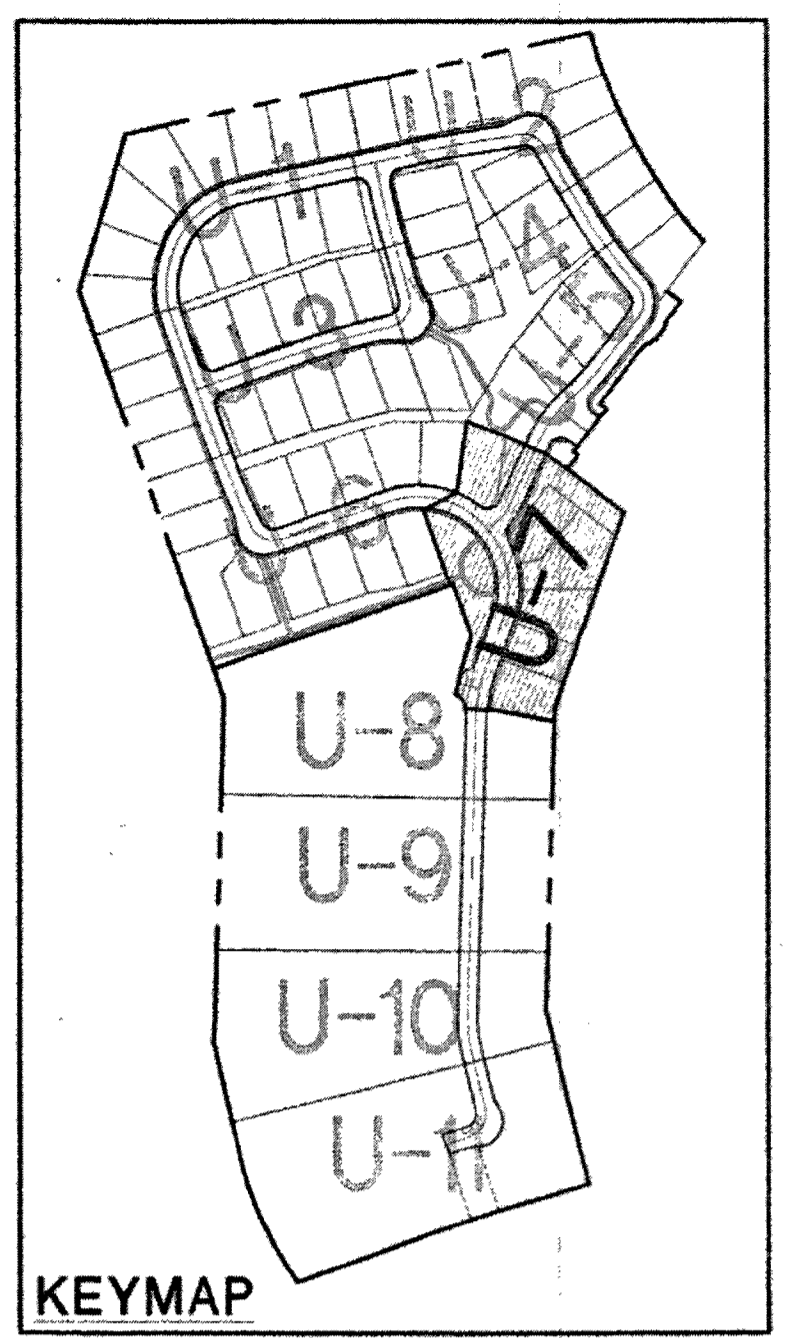
BASIS OF BEARINGS
 NORTH 89°46'48" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN FILE #91, PAGE 28 OF PARCEL MAPS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.



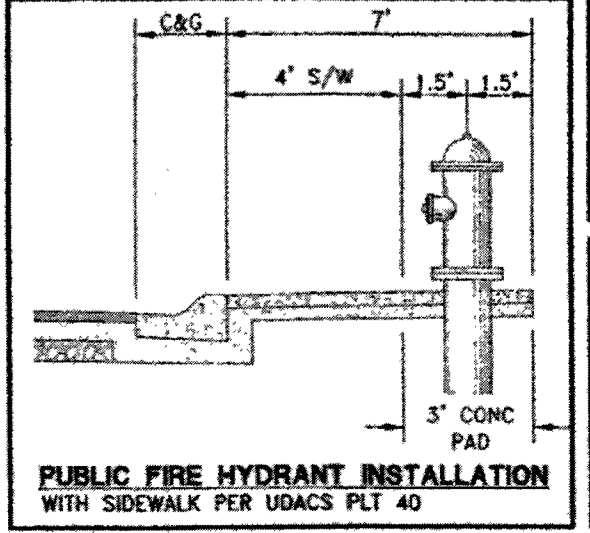
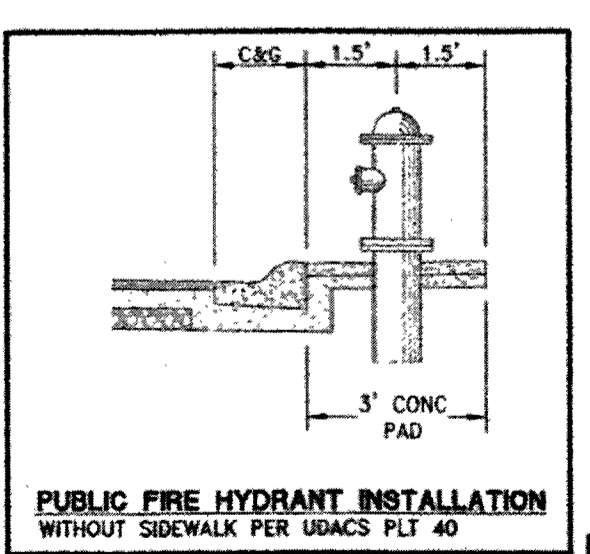
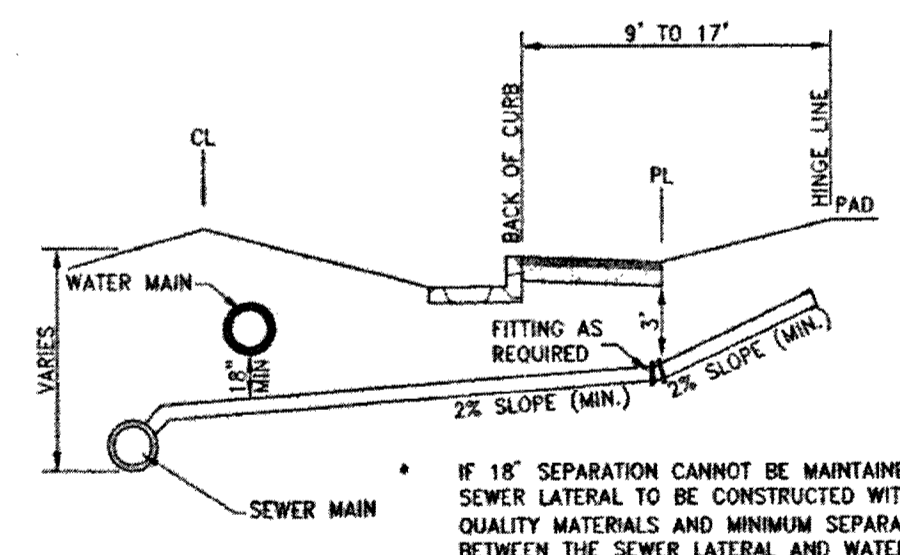
BACKWATER VALVE
 ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE NOTE
 NO LOTS IN THIS PROJECT REQUIRE ONSITE PRIVATE PRESSURE REDUCING VALVES.

REDUCING PRESSURE PRINCIPLE ASSEMBLY (RPPA)
 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 EASEMENT(S) 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.



- 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.



UTILITY LATERAL NOTE
 WATER AND SEWER LATERAL STATIONS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

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
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 PORTABLE 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 DIMENSIONS 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

WASTEWATER FLOW CALCULATION
 CALCULATIONS:
 66 ERU (66 LOTS) * 250 OPD = 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 6" GATE VALVE)
 - INSTALL 1" COPPER SERVICE LATERAL WITH 5/4" 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 5/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No.'s 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
 - INSTALL 1" COPPER SERVICE LATERAL WITH 5/8" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No.'s 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
 - 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
 DATE: 3/10/15
 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
 DATE: 03/11/15
 LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

TOLL SOUTH LV, LLC
 1140 TOWN CENTER DRIVE SUITE 250
 LAS VEGAS, NV 89144
 PHONE: 702-782-9500 FAX: 702-782-9510

ASBUIRGI Engineering
 4325 Dean Martin Drive Suite 300, Las Vegas, NV 89103
 Phone: 702-455-0200 FAX: 702-455-0201

ALTAURA UNIT 1
 A SINGLE FAMILY RESIDENTIAL SUBDIVISION
 UTILITY PLAN (SHEET 7 OF 11)

DATE: March 05, 2015
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: N/A
 DRAWN BY: CS
 DESIGNED BY: AW
 CHECKED BY: AW
 APPROVED BY: CLT
 PROJECT #: 3110.018

CITY OF LAS VEGAS
 CIVIL ENGINEER
 CHRISTOPHER THOMPSON
 Exp. 6/30/2016
 CIVIL ENGINEER
 LICENSE NO. 14134

3/11/15
 Drawing
U-7
 SHEET 23 OF 47
 1071502-4
 A# 5745