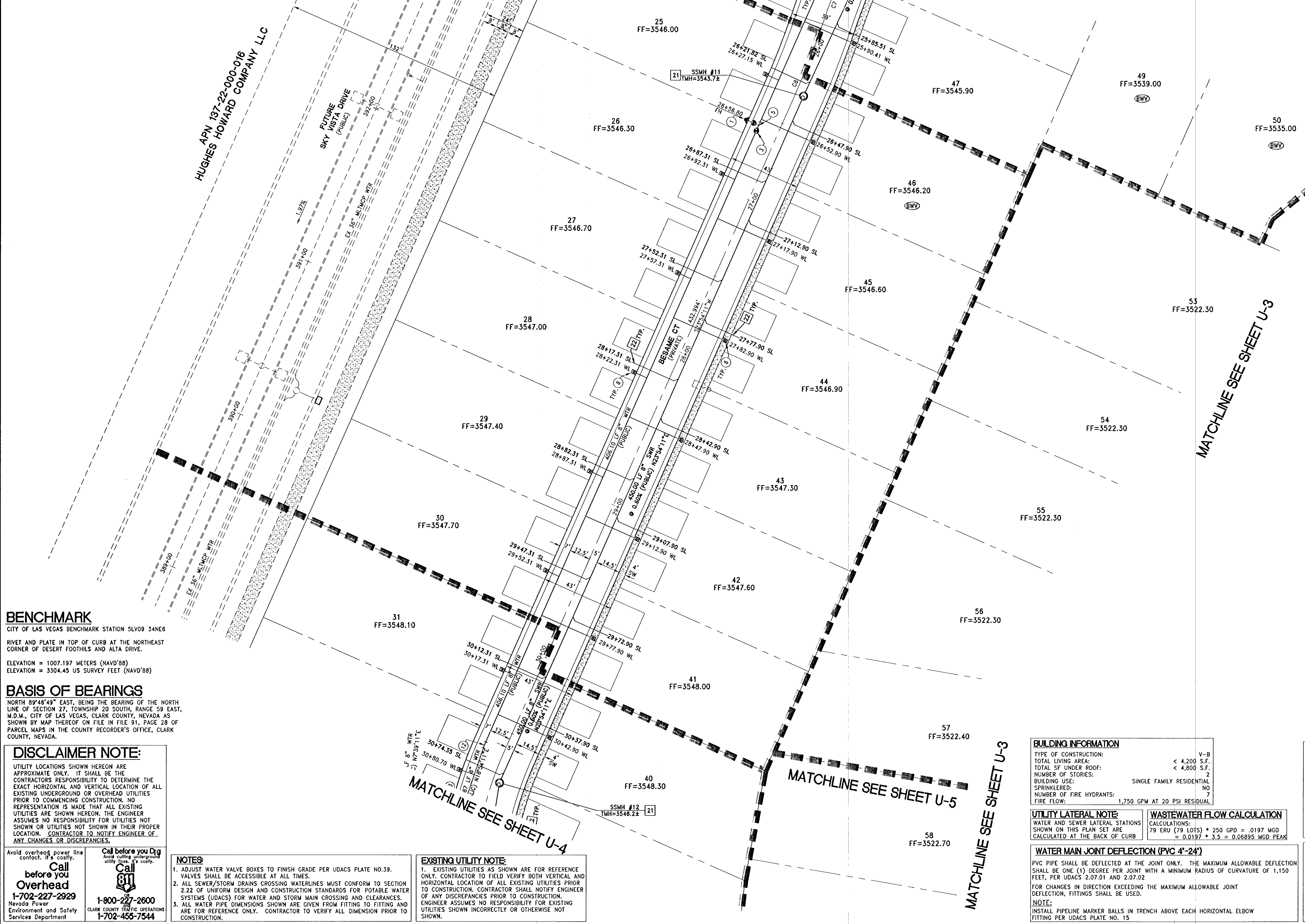
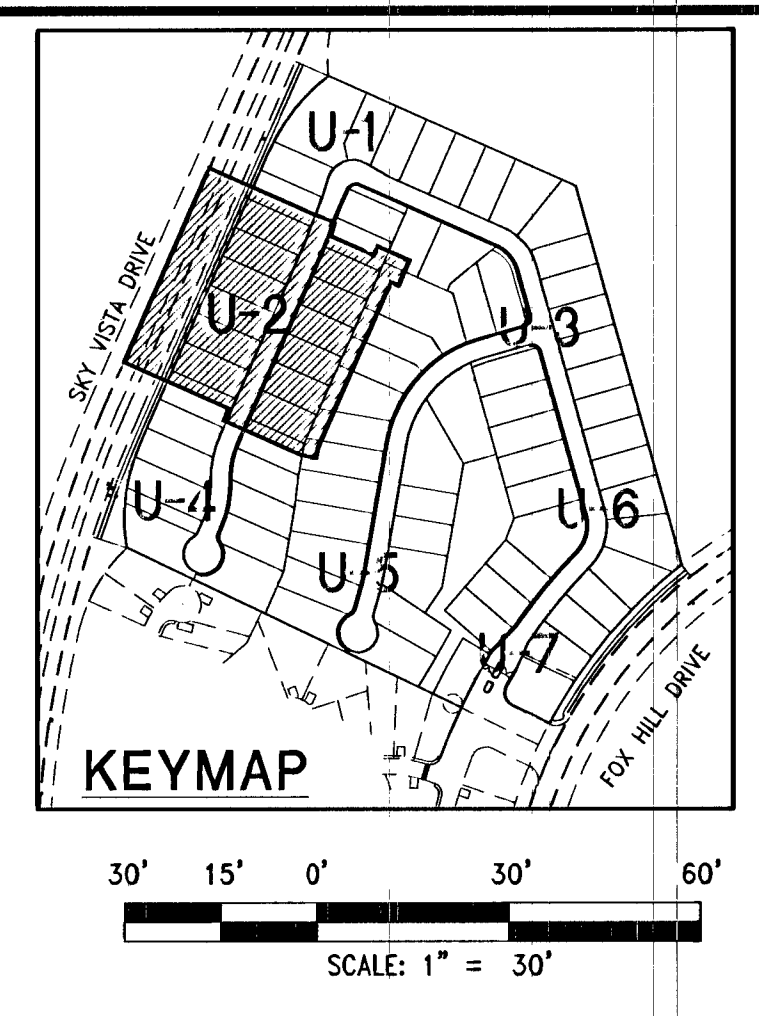


REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1'
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLIES SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. ANY BLOCK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

LOT UTILITY NOTE
THE PROPOSED RESIDENTIAL STRUCTURES ON LOTS 60, 61, 62, 63, 64, 65, 66 AND 67 SHALL BE EQUIPPED WITH A FIRE SPRINKLER SYSTEM (TYPE 13-D)

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C1	30.89	250.00	7.08	15.47
C2	20.24	250.00	4.64	10.13
C3	221.93	1197.05	10.62	111.29
C4	104.89	100.00	60.10	57.85
C5	87.87	100.00	50.35	47.00
C6	62.08	39.50	90.05	39.53
C7	45.31	500.00	5.19	22.67
C8	45.31	500.00	5.19	22.67
C9	91.52	210.50	24.91	46.49
C10	91.52	210.50	24.91	46.49
C11	23.92	223.50	6.13	11.97
C12	281.25	250.00	64.46	157.61



- WATER CONSTRUCTION NOTES**
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40 (INCLUDES 6" GATE VALVE)
 - CONNECT TO EXISTING 8" WATER MAIN
 - INSTALL 8" GATE VALVE PER UDACS PLATE NO. 30 & NO. 39
 - INSTALL 8" X 8" TEE PER UDACS PLATE NO. 31
 - INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
 - INSTALL 12" X 8" REDUCER PER UDACS PLATE NO. 30
 - INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE NO. 36
 - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2
 - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE NO. 3 & 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
 - INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
 - INSTALL 8" 45° BEND PER UDACS PLATE NO. 31
 - INSTALL 8" 5° BEND PER UDACS PLATE NO. 31 WITH RESTRAINTS
 - INSTALL 8" 11.25° BEND PER UDACS PLATE NO. 31
 - COMMON ELEMENT/EASEMENT REQUIREMENTS PER NOTES AND TEST STATION DETAIL ON SHEET MU-1
 - INSTALL 8" 22.5° BEND PER UDACS PLATE NO. 31
 - INSTALL 12" 90° BEND PER UDACS PLATE NO. 31
 - INSTALL 8" X 6" REDUCER PER UDACS PLATE NO. 30
 - INSTALL 6" 5° BEND PER UDACS PLATE NO. 31 WITH RESTRAINTS
 - INSTALL 8" VERTICAL 45° BEND PER UDACS PLATE NO. 31
 - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 2 (INSTALL 13-D FIRE SPRINKLER SYSTEM)
 - CUT CAP AND ABANDON 12" WTR LINE AT THIS POINT SEE (CUT AND CAP) NOTE
 - INSTALL 1" SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 4
 - INSTALL 6" 45° BEND PER UDACS PLATE NO. 31

- SEWER CONSTRUCTION NOTES**
- INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-1A, SD-4, SD-5 & SD-6)
 - INSTALL 4" SEWER LATERAL (PER DCSWCS STD. NO. SD-17, SD-22 & SD-25) AND 1 CU-FT THURST BLOCK & CAP
 - TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 24" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.

BACKWATER VALVE
(BW) ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

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

BUILDING INFORMATION
TYPE OF CONSTRUCTION: V-B
TOTAL LIVING AREA: < 4,200 S.F.
TOTAL SF UNDER ROOF: < 4,800 S.F.
NUMBER OF STORES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 7
FIRE FLOW: 1,750 GPM AT 20 PSI RESIDUAL

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

WASTEWATER FLOW CALCULATION
CALCULATIONS:
79 ERU (79 LOTS) * 250 GPD = .0197 MGD
= 0.0197 * 3.5 = 0.06895 MGD PEAK

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

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 1,750 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 5/22/14 PROJECT#: 122455
LVVWD APPROVED FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL

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°48'49" 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 THEREON ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

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.

Call before you dig
1-702-227-2929
1-800-227-2600
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

- 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.

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.

DATE: May 13, 2014
SCALE: 1"=30'
DRAWN BY: N/A
CHECKED BY: JIL
DESIGNED BY: JIL
APPROVED BY: JIL
PROJECT #: 31103007

TOLL SOUTH LV, LLC
1140 TOWN CENTER DRIVE SUITE 250
BOULEVARD
PHONE: 702-245-8800 FAX: 702-245-9610

RCI Engineering
4325 Dean Martin Drive Suite 200, Las Vegas, NV 89103
PHONE: 702-455-0800 FAX: 702-455-0801

**MONTECITO AT SUMMERLIN VILLAGE 23B PARCEL X
A SINGLE FAMILY RESIDENTIAL SUBDIVISION**

UTILITY PLAN (SHEET 2 OF 7)

CITY OF LAS VEGAS

APPROVED FOR CONSTRUCTION
DATE: 5/13/14

U-2
SHT 15 OF 39
CLV DRAWING NUMBER
145-3378
0274927
CLV PROJECT #