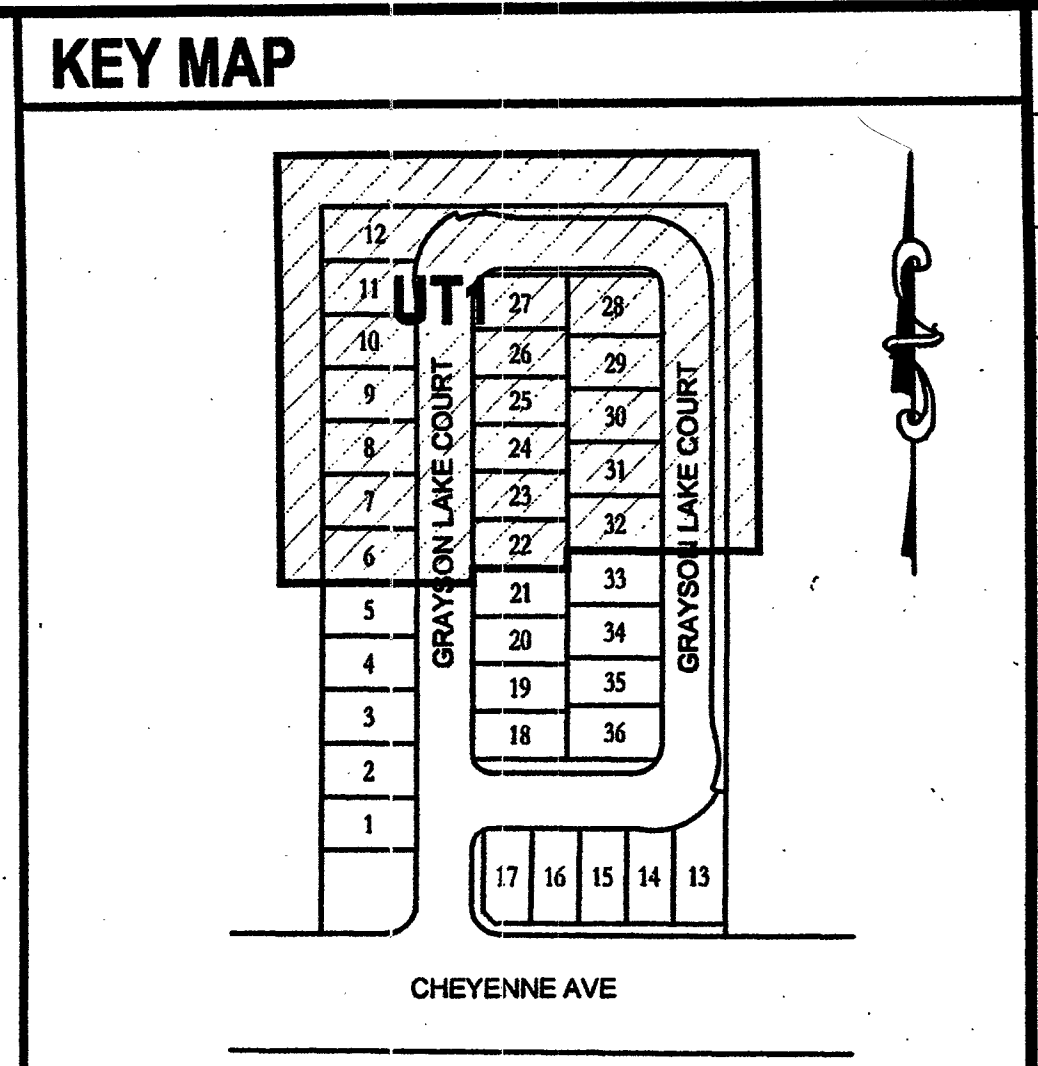
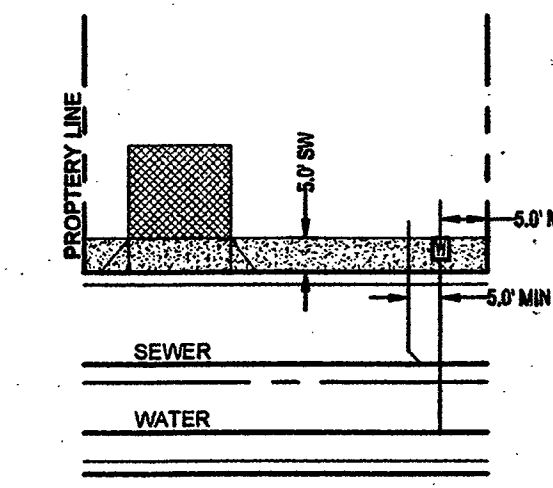


**Call Before You Dig**  
 AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. CALL  
**811**  
 OR  
 1-800-227-2600  
 AND  
 CLARK COUNTY TRAFFIC OPERATIONS  
 1-702-455-7544

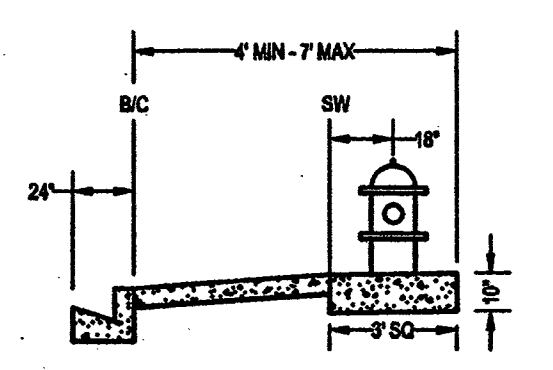
**AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY. CALL BEFORE YOU DIG OVERHEAD**  
  
 1-702-227-2929



**TYPICAL LOT LAYOUT**



**FIRE HYDRANT DETAIL**



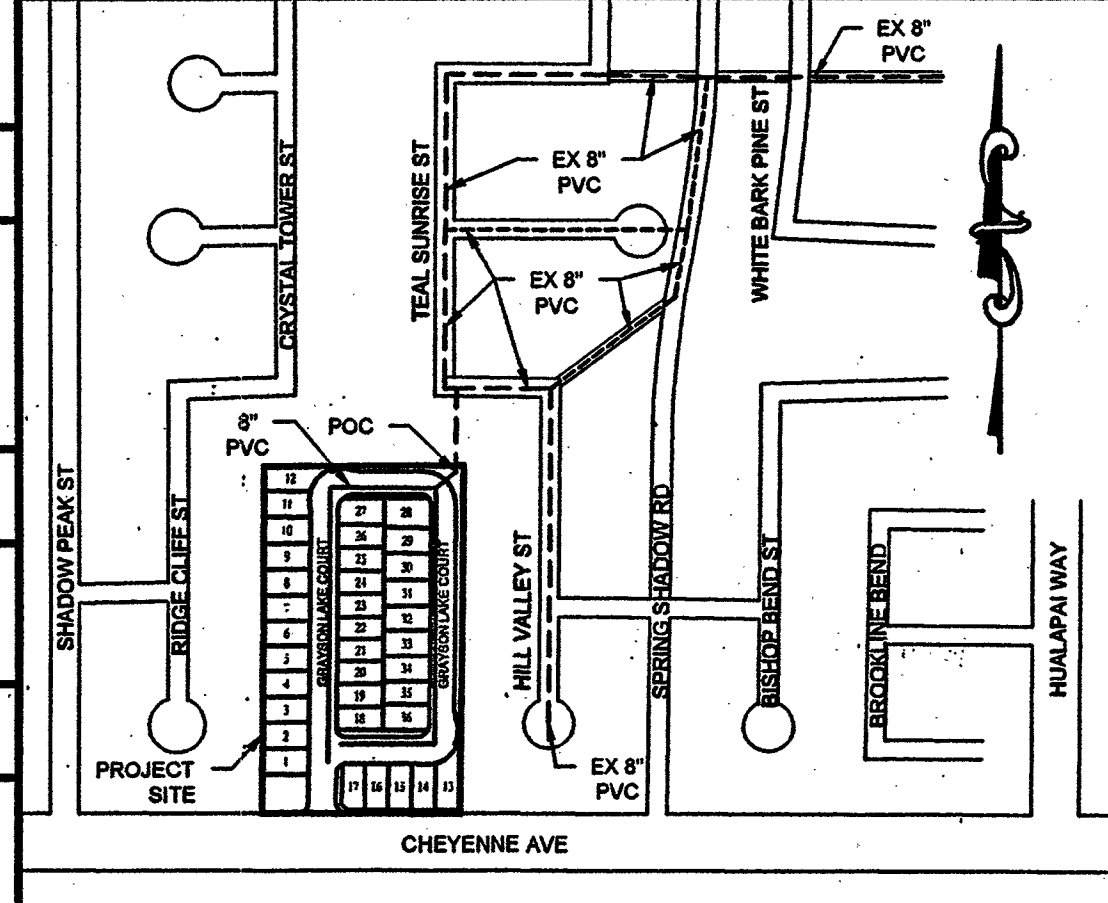
**UTILITY NOTES**

1. ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS), LATEST EDITION.
2. FIRE, WATER, AND SEWER SERVICES, AS APPROVED ON THIS PLAN, ARE INTENDED SPECIFICALLY FOR THE LOT AND USE SHOWN, AND ARE NOT INTENDED TO SERVICE ADDITIONAL PARCELS OR STRUCTURES WHICH MAY BE CREATED IN THE FUTURE. IN THE EVENT THAT THE PARCELS AND/OR LOTS SHOWN ON THIS PLAN ARE FURTHER DIVIDED TO CREATE ADDITIONAL PARCELS OR LOTS, THE OWNER IS REQUIRED TO PROVIDE SEPARATE FIRE, WATER, & SEWER SERVICES TO EACH.
3. WATER AND SEWER LATERALS SHALL BE INSTALLED A MINIMUM OF 48" APART IN SEPARATE TRENCHES. WATER LATERALS SHALL BE A MINIMUM OF 12" ABOVE THE SEWER LATERAL. (REF. UNIFORM PLUMBING CODE)
4. LOCATOR WIRE SHALL BE USED FOR ALL SERVICE LATERALS NOT PERPENDICULAR TO THE MAIN. (TYPICAL)
5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
6. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENTS HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO CLARK COUNTY.
7. ALL ONSITE STREETS AND DRAINAGE EASEMENTS ARE TO BE PRIVATELY OWNED AND MAINTAINED.
8. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING. (UDACS PLT. 15)

**CONSTRUCTION NOTES**

1. INSTALL 12" X 8" TAPPING SLEEVE W/ 8" TAPPING VALVE (UDACS 2.24.01 (B) PLATES 34 & 39)
2. INSTALL 8" X 8" TAPPING SLEEVE W/ 8" TAPPING VALVE (UDACS 2.2401(A) PLATES 34 & 39)
3. 8" 90° BEND (UDACS PLATE NO. 31)
4. REMOVE STUB & CAP & CONNECT TO EX. 8" SEWER
5. INSTALL (2) 4" IRRIGATION SLEEVES
6. CONSTRUCT FIRE HYDRANT ASSEMBLY W/ 8" GATE VALVE (UDACS PLT. 40)
7. 1" COPPER WATER SERVICE W/ 3/4" METER (UDACS PLT. 2)
8. 4" SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWS SD-22)
9. GATE VALVE (UDACS PLT. 30 & 39)
10. INSTALL 3/4" IRRIGATION METER W/ 1" RPPA (UDACS PLT. 4 & 8) BRASS BETWEEN MTR & RPPA
11. 8" 45° HORIZONTAL BEND (UDACS PLATE NO. 31)
12. 45° MANHOLE, BASE PRECAST. GRADE RING COLLAR & LID PER DCSWS STANDARDS
13. CORROSION PROTECTION PER DCSWS 3.16.8. MANHOLE LID MUST BE WATER TIGHT.
14. SAWCUT AND MATCH EX. AC PAVEMENT PER CCAUSD 503, 500.3 & 500.5
15. RELOCATE 4 INCH COMBINATION AIR VALVE ASSEMBLY PER UDACS PLATE NO. 38
16. 8" 45° VERTICAL BEND (UDACS PLATE NO. 31)

**SEWER DISCHARGE MAP**



REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 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 THE LVWD. 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.

**WASTEWATER CALCULATIONS**

FACILITY TYPE: SINGLE FAMILY RESIDENTIAL  
 TOTAL UNITS AT BUILD OUT: 36 HOUSES  
 AVERAGE FLOW (MGD) = 0.0059  
 PEAK FLOW (MGD) = 0.021  
 CALCULATIONS:  

$$\text{AVG FLOW} = 36 \times 80,000 \times \frac{1}{365} = 0.0089 \text{ MGD}$$

$$\text{PEAK FLOW} = 0.0089 \times 3.5 = 0.031 \text{ MGD}$$

**LVWD WATERTIGHT SHUTDOWN**

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH THE INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.  
 CON TRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

**LVWD EASEMENT NOTES**

TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLIES, AND PIPES FROM THE ADJACENT RIGHT-OF-WAY.

**EXISTING SERVICES NOTES**

IF A NY EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE UDACS STANDARDS, AND AT THE DEVELOPER'S EXPENSE.

MH#	RIM	EL
#1	9.72	
#2	9.88	
#3	5.40	

**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 MAXIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.04 AND 2.07.02.  
 FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

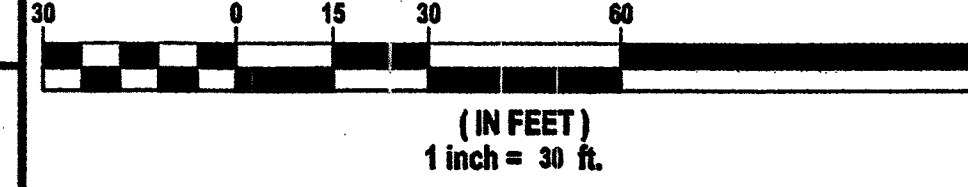
**FIRE FLOW CALCULATIONS**

FIRE FLOW REQUIREMENT IS 1,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.  
 BASED ON:  
 SQUARE FOOTAGE: 2,800 SQ FT MAX  
 LARGEST AREA BETWEEN SEPARATE WALLS:  
 NA  
 HEIGHT: UP TO 35' MAX  
 TYPE OF CONSTRUCTION: V-B  
 SPRINKLER SYSTEM: NO  
 OCCUPANCY: R-3  
 ROOF CONSTRUCTION: WOOD  
 STORES: 2  
 HIGH PILED COMBUSTIBLE STORAGE: NO  
 ESFR SYSTEM: NO

**UTILITY DISCLAIMER NOTE**

EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 LOCATIONS.  
 CALL BEFORE YOU DIG: 1-800-227-2600  
 CALL BEFORE YOU OVERHEAD: 1-702-227-2929

**SCALE**



**LEGAL DESCRIPTION**

A PORTION OF SOUTH HALF (S 1/2) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

**BASIS OF BEARINGS**

NORTH 89°32'44" WEST, BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 81 OF SURVEYS, AT PAGE 44.

**BENCHMARK**

RIVET AND PLATE IN TOP OF CURB ON THE SOUTH SIDE OF CHEYENNE +A-14 MILE WEST OF HUALAPAI WAY  
 853.856m/2801.38FT (NAVD 88 DATUM)

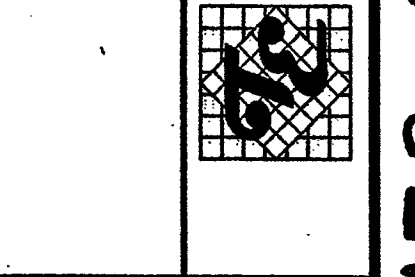
**APPROVAL BLOCK**

DATE: 6/19/14  
 SCALE: 1"=30'  
 JOB NO: ADV-13-004  
 DESIGNED BY: SJT  
 CHECKED BY: RC  
 SHEET NAME: UT1  
 SHEET: 13 OF 16  
 LVWD # 122235  
 CLV 107/5000 HW 53602

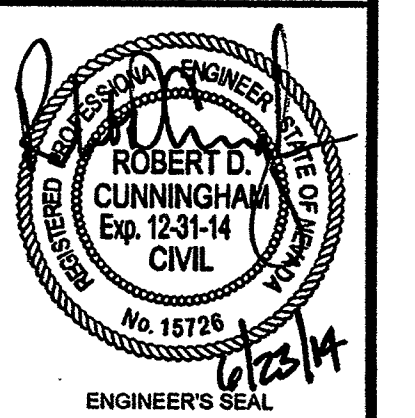
NO.	DESCRIPTION	REVISIONS	APPR.	DATE

ADAVEN HOMES  
 8112 DOLENTA AVENUE  
 LAS VEGAS, NV 89128  
 (702) 283-6200 FAX: (702) 382-8844

TANNEY ENGINEERING  
 6008 S. JONES BLVD STE 100  
 LAS VEGAS, NV 89118  
 (702) 382-8844 FAX: (702) 382-8844



CHEYENNE WEST OF HUALAPAI  
 A RESIDENTIAL SUBDIVISION  
 UTILITY PLAN - NORTH



DATE: 6/19/14  
 SCALE: 1"=30'  
 JOB NO: ADV-13-004  
 DESIGNED BY: SJT  
 CHECKED BY: RC  
 SHEET NAME: UT1  
 SHEET: 13 OF 16  
 LVWD # 122235  
 CLV 107/5000 HW 53602

SEWER ASBUILTS