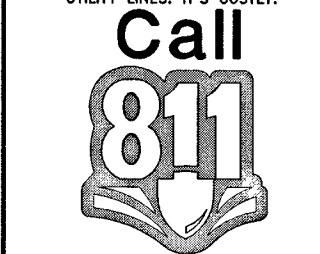


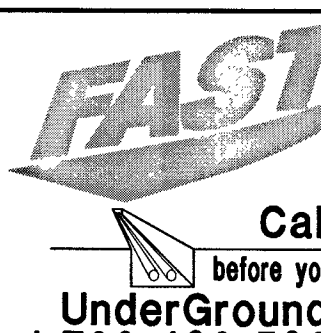
DISCLAIMER NOTE:

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
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY.

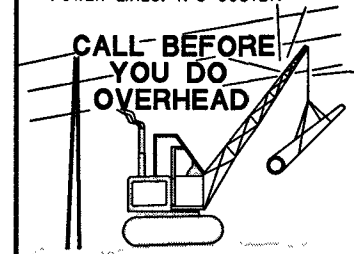


1-800-227-2600

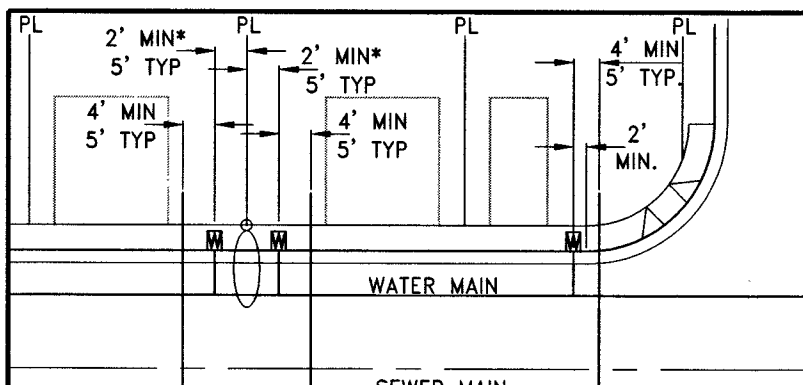


1-702-432-5300

Call before you Dig
AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.



1-702-227-2929



TYPICAL WATER AND
SEWER LATERAL LOCATIONS

*MINIMUM SEPARATION OF 5-FEET REQUIRED FROM STREET LIGHT
CENTER TO WATER METER BOX CENTER

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER NOTE FOR ALL LOTS

- THIS PROJECT RESIDES WITHIN THE 2860 WATER ZONE. THEREFORE ALL LOTS WITH A FINISH FLOOR ELEVATION LESS THAN 2651.4 WILL REQUIRE AN INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE REDUCING VALVE.
- THIS PROPERTY HAS STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THEREFORE LOTS WITHIN THIS PROJECT REQUIRE PRESSURE REDUCING VALVES. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

EXISTING UTILITY NOTE:

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.

WATER MAIN JOINT DEFLECTION (PVC 4\"/>

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

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.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY 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 TO ALLOW THE DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

BUILDING INFORMATION

TYPE OF CONSTRUCTION: V-8
TOTAL LIVING AREA: < 5,000 S.F.
TOTAL S.F. UNDER ROOF: < 6,000 S.F.
NUMBER OF STORIES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 3
FIRE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 6LV99 245ES
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF CENTENNIAL PARKWAY AND HUALAPAI WAY.

ELEVATION=844.924 METERS (NAVD'88)
ELEVATION=2772.06 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS

SOUTH 89°47'00" EAST BEING THE BEARING OF THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 89, PAGE 3 OF SURVEYS.

BACKWATER VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

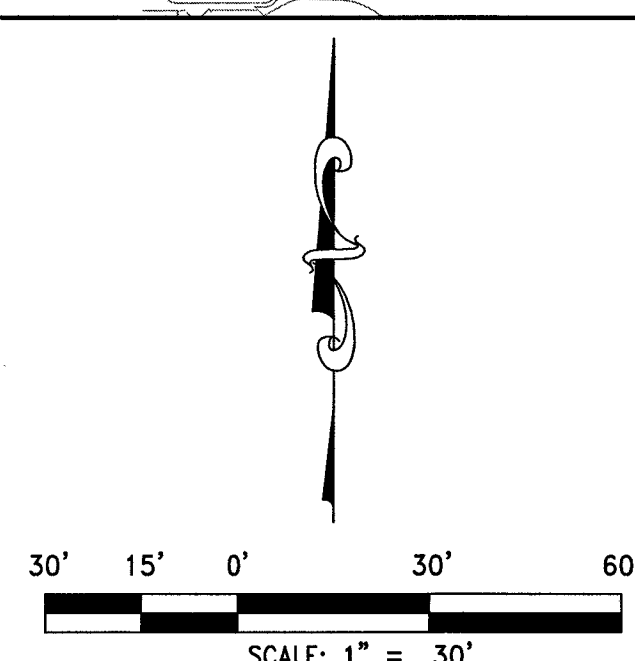
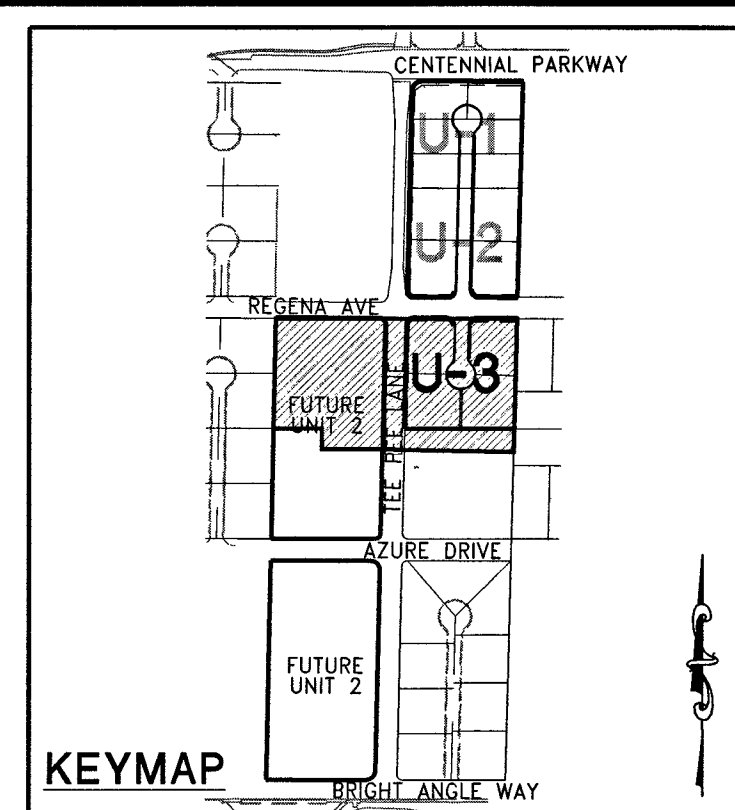
ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE

UTILITY LATERAL NOTE:

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

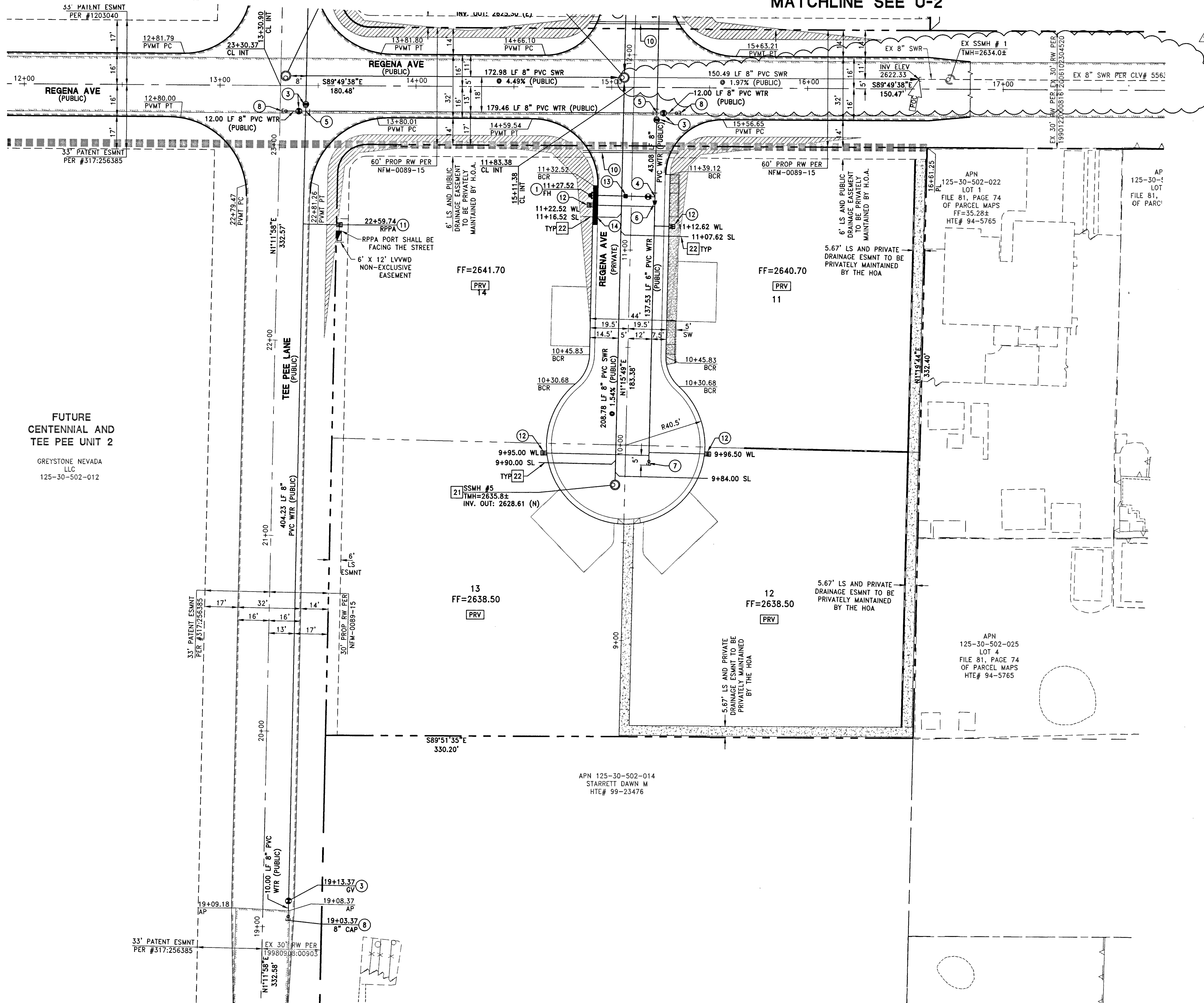
WASTEWATER FLOW CALCULATION

14 ERU (14 LOTS) * 250 GPD = 0.0035 MGD
= 0.0035 * 3.5 = 0.0123 MGD PEAK
DESIGN FLOW (25% WET WEATHER ALLOWANCE)
DESIGN FLOW 0.0123 + 25% = 0.0154 MGD



MATCHLINE SEE U-2

MATCHLINE SEE U-2



WATER CONSTRUCTION NOTES

- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40 (INCLUDES 6\"/>
- INSTALL 1\"/>
- INSTALL 8\"/>
- INSTALL 8\"/>
- INSTALL 8\"/>
- INSTALL 8\"/>
- INSTALL 6\"/>
- INSTALL 8\"/>
- REMOVE EX CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
- INSTALL (2) 4\"/>
- INSTALL 1\"/>
- (FOR IRRIGATION) WITH 1\"/>
- REMOVE EX CAP AND BLOWOFF AND CONNECT TO EXISTING WATER MAIN PER UDACS PLATE NO. 36
- INSTALL 1\"/>
- INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, OR FIRE LANES
- PAINT CURB RED IN FRONT OF FIRE HYDRANT
- PAINT CURB RED IN FRONT OF FIRE DEPARTMENT EMERGENCY ACCESS

SEWER CONSTRUCTION NOTES

- INSTALL 48\"/>
- INSTALL 1\"/>
- (TYP) INSTALL 4\"/>
- TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18\"/>
- INSTALL 8\"/>

FOR DRY UTILITY SEPARATION WITH WATER:

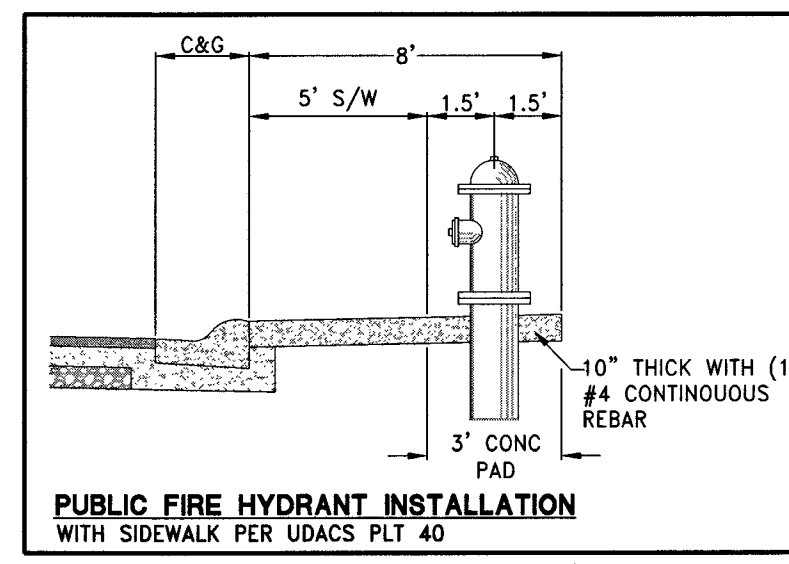
- MAINTAIN MINIMUM 12\"/>
- MAINTAIN A MINIMUM 3\"/>
- ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT, OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

CLARK COUNTY FIRE DEPARTMENT APPROVAL

BY: *Christopher R. Zrinyi* DATE: 12-10-15
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 LVWD.
FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL 15-6288

APPROVED FOR CONSTRUCTION

BY: *Christopher R. Zrinyi* DATE: 12-11-15
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT: 122286
LVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL
HTE NUMBER: 307V1109



DATE: December 08, 2015
HORIZ. SCALE: 1\"/>

REVISIONS

NO.	DESCRIPTION	DATE
1	REVISE EX SEWER MANHOLE LOCATION	12/08/15

PROJECT # 3040.0038

LENNAR
2400 PASADENA PARKWAY, SUITE 100, LAS VEGAS, NV 89074
PHONE: (702) 736-5100 FAX: (702) 736-9200

RCI Engineering
4325 Dean Martin Road, Suite 300, Las Vegas, NV 89103
PHONE: (702) 453-0800 FAX: (702) 453-0801

IMPROVEMENT PLANS FOR
CENTENNIAL AND TEE PEE UNIT 1
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
UTILITY PLAN
(SHEET 3 OF 3)

CLARK COUNTY
13000 LVWD_CIVIL_P51 UNIT 1\3000_001.dwg chivra 12/08/15 5:40pm

12-9-15
DRAWING
U-3
SHEET 12 OF 21
HTE NUMBER
14-23518