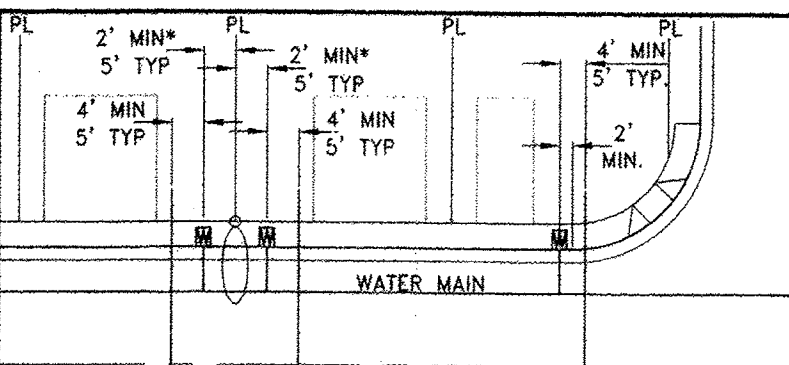


DISCLAIMER NOTE:

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 THE 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
Call before you Overhead
1-702-227-2829
Nevada Power
Environmental and Safety
Services Department

Call before you Dig
Call before you Overhead
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM



TYPICAL WATER AND SEWER LATERAL LOCATIONS
MINIMUM SEPARATION OF 5'-0" REQUIRED FROM STREET LIGHT CENTER TO WATER METER BOX CENTER. REFER TO DETAIL 5 SHEET U-3 FOR SEWER AND WATER CROSSING DETAIL.

BUILDING INFORMATION

TYPE OF CONSTRUCTION: V-B
TOTAL LIVING AREA: < 5,000 S.F.
TOTAL SF UNDER ROOF: < 6,000 S.F.
NUMBER OF STORIES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: NO
FIRE FLOW: 2000 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

31 ERU (31 LOTS) * 250 GPD = 0.00775 MGD
= 0.00775 * 3.5 = 0.02712 MGD PEAK
DESIGN FLOW (25% WET WEATHER ALLOWANCE)
DESIGN FLOW 0.02712 + 25% = 0.034 MGD

NOTES:

- ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO. 59. 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")

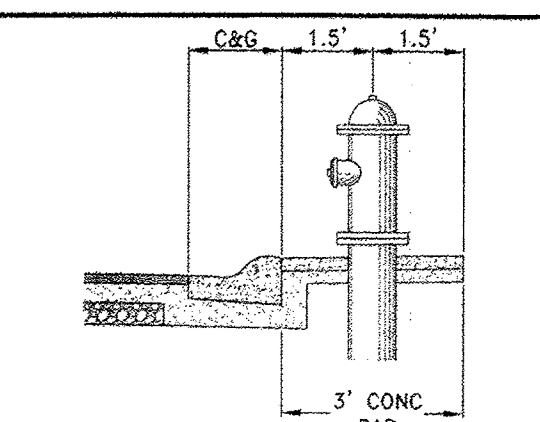
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

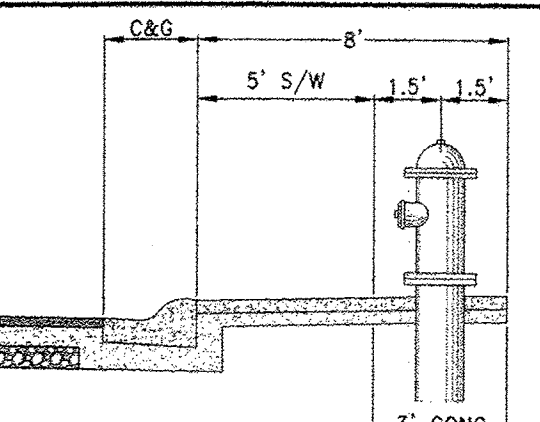
NOTE:
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

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 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.



PUBLIC FIRE HYDRANT INSTALLATION
WITHOUT SIDEWALK PER UDACS PLT 40



PUBLIC FIRE HYDRANT INSTALLATION
WITH SIDEWALK PER UDACS PLT 40

WATER NOTE FOR LOTS 4-21

- THESE LOTS RESIDE WITHIN THE 3090 WATER ZONE. THEREFORE ALL LOTS WITH A FINISH FLOOR ELEVATION LESS THAN 2905.38 WILL REQUIRE AN INDIVIDUAL, ON SITE (PRIVATE) PRESSURE REDUCING VALVE.
- THIS PROPERTY FOR LOTS 4-21 HAS STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THEREFORE THE 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 LVVWD FACILITIES. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

WATER NOTE FOR LOTS 1-3 & 22-31

- THESE LOTS RESIDE WITHIN THE 2975 WATER ZONE. THEREFORE ALL LOTS WITH A FINISH FLOOR ELEVATION LESS THAN 2779.38 WILL REQUIRE AN INDIVIDUAL, ON SITE (PRIVATE) PRESSURE REDUCING VALVE.
- THIS PROPERTY FOR LOTS 1-3 & 22-31 DOES NOT HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THEREFORE THE LOTS WITHIN THIS PROJECT DO NOT REQUIRE ANY 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 LVVWD 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.

CLARK COUNTY 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 2000 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 2/2/13 PROJECT: 122285
LVVWD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

SEWER CONSTRUCTION NOTES

- INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. NO. SD-1A, 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.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 6LV99 25M4
A RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF CENTENNIAL PARKWAY AND ALPINE RIDGE WAY.
ELEVATION=870.547 METERS (NAVD'88)
ELEVATION=2856.12 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS

NORTH 00°30'49" WEST BEING THE BEARING OF THE WEST LINE OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 25, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREON ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 89, PAGE 5 OF SURVEYS.

BACKWATER VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

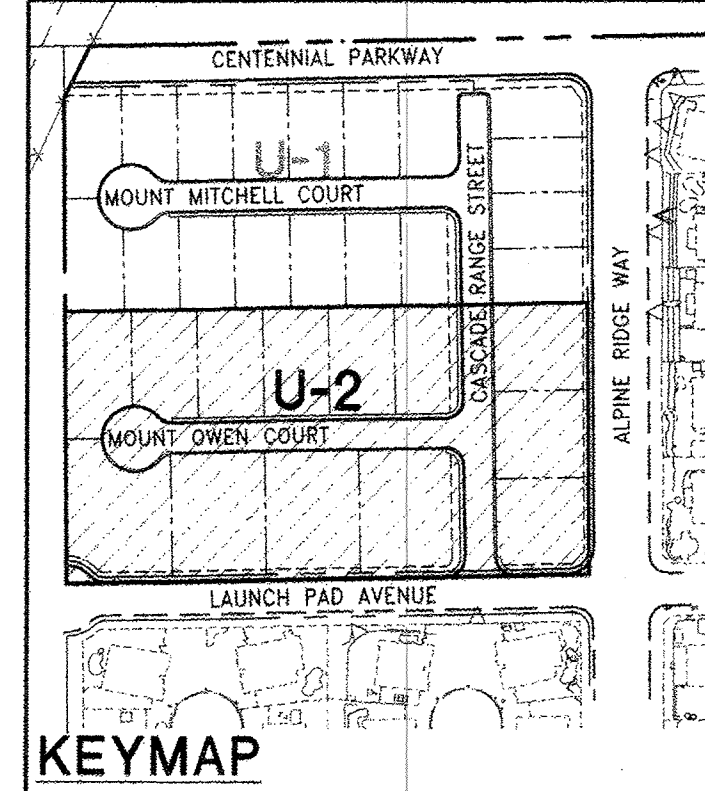
ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE

NOTE

SERVICE LATERALS FOR LOTS 6 AND 7 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVVWD.

WATER CONSTRUCTION NOTES

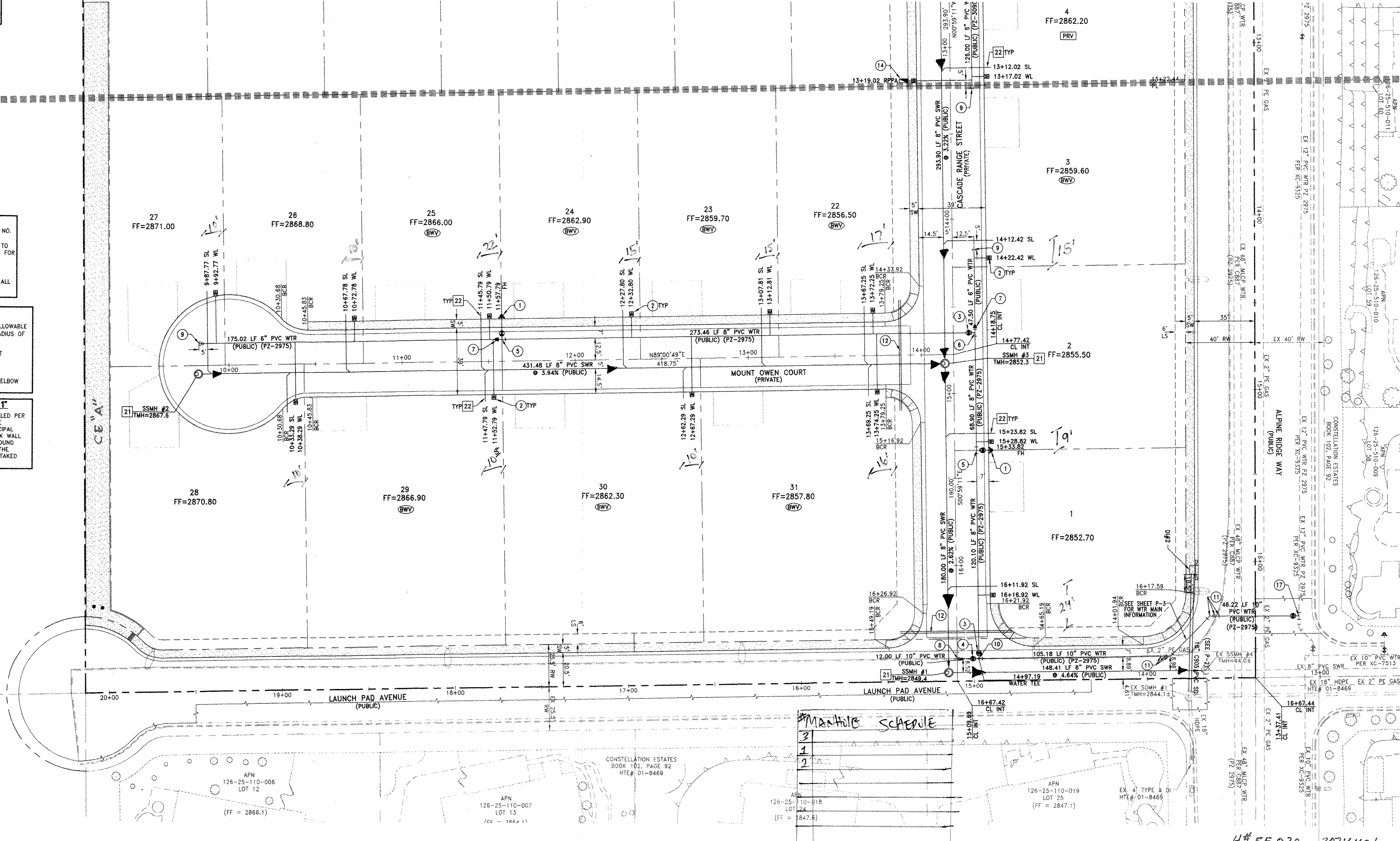
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 39 & 40 (INCLUDES 6" GATE VALVE)
- INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE NO. 4
- INSTALL 6" GATE VALVE PER UDACS PLATE NO. 30 & No. 39
- INSTALL 10" GATE VALVE PER UDACS PLATE NO. 30 & No. 39
- INSTALL 8" X 8" TEE PER UDACS PLATE No. 31
- INSTALL 8" X 6" REDUCER PER UDACS PLATE No. 30
- INSTALL 10" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 36
- INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 36
- INSTALL 10" X 8" TEE PER UDACS PLATE No. 31
- INSTALL 10" 45° BEND PER UDACS PLATE No. 31
- INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
- RELOCATE ANODE TEST STATIONS PER DETAILS ON SHEET U-3
- INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No. 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
- REMOVE EXISTING 8" CAP AND 2" BLOWOFF AND CONNECT TO EXISTING 8" WATER MAIN
- REMOVE EXISTING 6" CAP AND CONNECT TO EXISTING 6" WATER MAIN
- INSTALL 12" X 10" TAPPING SLEEVE W/10" TAPPING VALVE PER UDACS PLATE No. 34 & 39 AND SECT. 2.24.01
- ADJUST EXISTING TEST STATION TO GRADE



30' 15' 0' 30' 60'
SCALE: 1" = 30'

MATCHLINE SEE U-1

MATCHLINE SEE U-1



DATE: January 18, 2015
HORIZ. SCALE: 1"=30'
VERT. SCALE: N/A
DRAWN BY: MJD
CHECKED BY: AW
DESIGNED BY: CT
APPROVED BY: [Signature]
PROJECT #: 30000035

LENNAR
2450 PASO VERDE PARKWAY SUITE 120 HENDERSON, NV 89074
PHONE: (702) 756-6100 FAX: (702) 756-9200

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

NEVADA

IMPROVEMENT PLANS FOR
CENTENNIAL AND ALPINE
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
UTILITY PLAN
(SHEET 2 OF 3)

CLARK COUNTY
CIVIL ENGINEER
CHRISTOPHER R. ZIMNY
Exp. 6/30/2016
CIVIL
1-19-15
DRAWING
U-2
SHT 9 OF 18
HTE NUMBER
14-23516