

ASBUILT

WESTERN STATES CONTRACTING, INC.
4129 W. CHEYENNE AVE. SUITE B
N. LAS VEGAS, NV 89032

1-702-227-2929

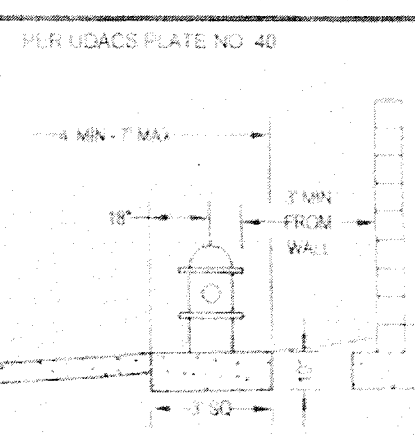
PRV NOTE

1. ALL PRIVATE LATERALS SHALL BE INSTALLED TO THE PROPERTY LINE OR TO THE CENTERLINE OF THE STREET, WHICHEVER IS THE CLOSEST. THE LATERAL SHALL BE INSTALLED TO THE PROPERTY LINE OR TO THE CENTERLINE OF THE STREET, WHICHEVER IS THE CLOSEST. THE LATERAL SHALL BE INSTALLED TO THE PROPERTY LINE OR TO THE CENTERLINE OF THE STREET, WHICHEVER IS THE CLOSEST.

WATER MAIN JOINT DEFLECTION

1. ALL WATER MAIN JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS), LATEST EDITION.

FIRE HYDRANT DETAIL



WASTEWATER CALCULATIONS

PHASE 2
FACILITY TYPE: SINGLE FAMILY RESIDENTIAL
TOTAL UNITS AT BUILD OUT: 60 HOUSES
AVERAGE FLOW (MGD) = 0.015
PEAK FLOW (MGD) = 0.025
PEAK WET (MGD) = 0.065
CALCULATION:
AVG FLOW = 60 X (0.000385) X (1/1,000,000) = 0.015 MGD
PEAK FLOW = 0.015 X 1.5 = 0.0225 MGD
PEAK WET = 0.0225 X 1.25 = 0.0281 MGD

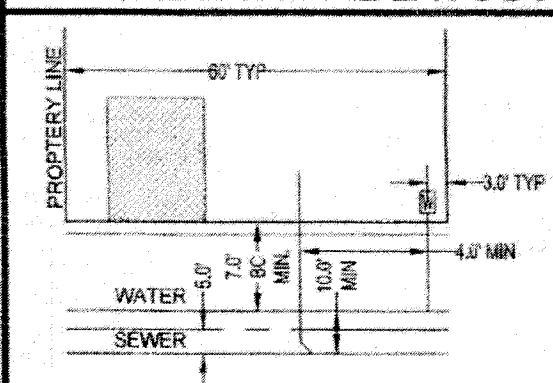
EASEMENTS

EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL OR FENCE
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 ASSEMBLY, AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 1,750 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.
BASED ON:
1. AVAILABLE AREA: 3,435 SQ FT
2. AREA UNDER ROOF: 4,899 SQ FT
3. LARGEST AREA BETWEEN SEPARATE WALLS: 11A
4. HEIGHT: 30'
5. TYPE OF CONSTRUCTION: Y-B
6. SPRINKLER SYSTEM: NO
7. HIGH PILED COMBUSTIBLE STORAGE: NO
OCCUPANCY: RESIDENTIAL
ROOF CONSTRUCTION: TILE
STORIES: 2
ESFR SYSTEM: NO

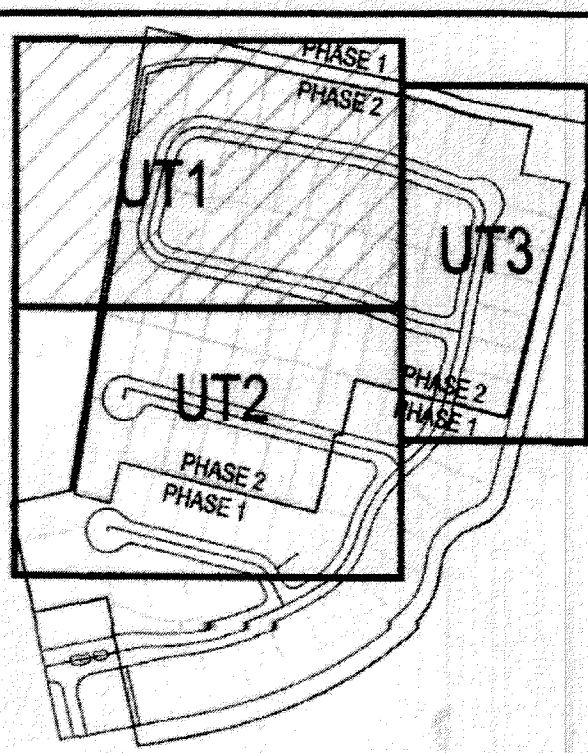
TYPICAL LATERAL LAYOUT



CONSTRUCTION NOTES

1. EX 4" PVC SEWER LATERAL 6" MIN SEPARATION FROM WATER MAIN
2. REMOVE CAP & BLOW OFF PER UDACS PLATE NO. 36 & CONNECT TO EX 8" STUB PER UDACS PLATE NO. 19
3. FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE (UDACS PLATE NO. 40)
4. 2" 4" PVC IRRIGATION CONDUIT
5. 8" GATE VALVE (PLATE NO. 30 & 39)
6. 8" TEE (PLATE NO. 31)
7. 8" 11.25" BEND (PLATE NO. 31)
8. 8" 22.5" BEND (PLATE NO. 31)
9. 8" 45" BEND (PLATE NO. 31)
10. 8" 90" BEND (PLATE NO. 31)
11. 8" 180" BEND (PLATE NO. 31)
12. 2" BLOW-OFF ASSEMBLY (PLATE NO. 36)
13. 1" WATER SERVICE W/ 3/4" METER (PLATE NO. 2)
14. 3/4" IRRIGATION METER W/ 1" RPPA (PLATE NO. 4 & 8)
15. 48" PRECAST MANHOLE (DCSWCS SD-1)
16. 4" PVC SEWER LATERAL W/ MARKER BALL & CURB MARKING (DCSWCS SD-22)
17. INSTALL MANHOLE W/ WATER TIGHT, AGENCY APPROVED ELECTROMETRIC JOINT SEALANT PER UDACS SECTION 2.22
18. 12" 180" WATERLINE REDUCER (UDACS PLT. 30)
19. 12" VERTICAL 45" BEND (PLATE NO. 22)
20. 24" STEEL SLEEVE (PLATE NO. 22 & 23)
21. INSTALL CONCRETE CAP PER DCSWCS SD-21
22. LVVWD TEST STATION (SEE DETAIL BB SHEET P-05)
23. 6" 90" WATERLINE REDUCER (UDACS PLT. 30)
24. 1" WATER SERVICE W/ 3/4" METER (PLATE NO. 4)

KEY MAP



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. UDACS SECTION 2.22.03)
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)

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: 1-800-277-2800 CALL BEFORE YOU OVERHEAD: 1-702-227-2929

WATER MAIN JOINT DEFLECTION

PVC 4" 402
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 1,180 FEET, PER UDACS 2.07.01 AND 2.07.02.
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

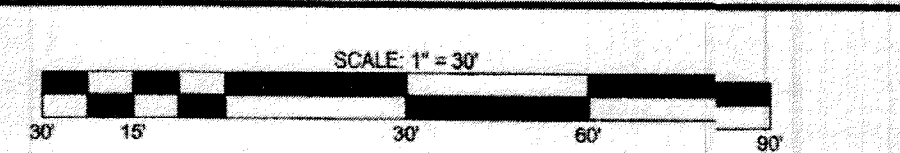
RPPA NOTES (1) 1"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE 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(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.

LVVWD NOTES

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUT DOWN 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 IMPERE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
MAINTAIN A MIN. 3' OF HORIZONTAL CLEARANCE FROM WATER MAINS AND DRY UTILITIES PER UDACS SECTION 2.04.02
MAINTAIN MIN. 12" OF VERTICAL CLEARANCE BETWEEN WATER MAINS AND DRY UTILITIES PER UDACS SECTION 2.04.06
MAINTAIN MIN. 6" OF VERTICAL CLEARANCE BETWEEN WATER LATERALS AND DRY UTILITIES PER UDACS SECTION 2.04.06

SCALE



LEGAL DESCRIPTION

PARCEL 2 OF SUMMERLIN VILLAGE 23B UNIT 3 AS SHOWN IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN BOOK 147, PAGE 12 OF PLATS, LYING WITHIN SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BASIS OF BEARINGS
NORTH 01°02'07" EAST, BEING THE BEARING OF THE WEST LINE OF SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN BOOK 147, PAGE 12 OF PLATS.

BENCHMARK

713027288: RIVET AND PLATE IN TOP OF CURB AT NE CORNER OF MOUNTAIN SHADOW ROAD AND DESERT FOOTHILLS ROAD. ELEV = 3232.31 FEET/1013.56 METERS (NAVD83)

APPROVAL BLOCK

APPROVED FOR CONSTRUCTION
1. DISHAKI, R. D. 6/19/15
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
LVVWD APPROVED FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL.
LAS VEGAS FIRE DEPARTMENT
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. FIRE FLOW = 1,750 G.P.M. AT 20 PSI RESIDUAL.

NO.	DESCRIPTION	REVISIONS	DATE
1	UTILITY PLAN 1		6/11/15
2	UTILITY PLAN 1		6/11/15
3	UTILITY PLAN 1		6/11/15
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