

APPROVALS

CITY OF LAS VEGAS FIRE MARSHAL
 FIRE MARSHAL 1500 CPM @ 20 PSI RESIDUAL
 LAS VEGAS VALLEY WATER DISTRICT
 SOUTHWEST GAS CORPORATION

DATE: 5-30-97
 DATE: 6-19-97
 DATE: 5-28-97

SEWER NOTE:

ALL SEWER SHOWN IS PUBLIC AND IS TO BE MAINTAINED BY THE CITY OF LAS VEGAS.

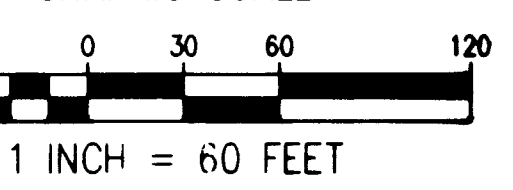
PROJECT SEWER FLOW CONTRIBUTIONS - PHASE I

AVERAGE DAILY FLOW = 0.0125 MGD
 PEAK DAILY FLOW = 0.0374 MGD

STREET LIGHT NOTES

ALL STREET LIGHT INSTALLATION SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE SUMMERLIN IMPROVEMENT STANDARDS.

GRAPHIC SCALE



CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
3. CHASE, 12" OR 10" IN CUBES WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLY(VINYL CHLORIDE) (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE I GRAVEL.
5. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
7. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN, MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE-TENTH (0.1) OF A FOOT FROM APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.

REV. OCT. 2, 1991

REDUCED PRESSURE PRINCIPLE ASSEMBLY (3/4")

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED IN THE UGAS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRED BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS SUCCESSFULLY TESTED BY THE LVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED TO ALLOW THE DISTRICT DIRECT A FROM THE ADJACENT RIGHT-OF-WAY.

FUTURE SERVICE LATERALS AND METERS

(10) 1" SERVICE W/ 3/4" WATER METER

INSTALLATION OF SERVICE LATERALS (1" TO 2") FOR FUTURE LOTS SHALL BE INSTALLED PER THE UGAS PLATE NO. 1B. IF ANY OF THE SERVICE LATERALS FOR FUTURE LOTS ARE INCORRECTLY LOCATED OR ARE NOT USED FOR ANY REASON WHEN THE LOTS ARE DEVELOPED, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE.

SERVICE LATERALS FOR LOTS 52, 53, THE PARK AND LOTS 100 AND 101 OF FUTURE OAK HILLS - PHASE II WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVWD.

APPROVAL OF THESE PLANS FOR THE SERVICE LATERALS AND METERS TO FUTURE LOTS WILL NOT BE CONSIDERED AS A COMMITMENT FOR WATER SERVICE TO THESE PROPERTIES.

LAS VEGAS VALLEY WATER DISTRICT NOTES

1. NO WORK SHALL BEGON ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVWD COMMUNICATIONS CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00PM THE BUSINESS DAY PRIOR TO A LVWD INSPECTION.
2. ALL WORK SHALL CONFORM TO THE LVWD'S STANDARD PLATES, DRAWINGS AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UGAS), LATEST EDITION.
3. NO WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT "RAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENT, CLARK COUNTY AREA".
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND WALLS SHALL BE COPPER TUBING WITH LVWD APPROVED "A" FITTINGS.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE.
7. ALL VALVES SHALL BE LOCATED OUTSIDE DRIVEWAYS, VA AND CURB CUTTERS.
8. THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT LINE AND SANITARY OR STORM SEWER LINE CROSS.
 - A. MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE VA BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE (1) FOLLOWING OR, AS SHOWN ON THESE PLANS:
 - A) POTABLE WATER SUPPLY QUALITY MATERIAL
 - B) ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM 4" THICK) WITH POTABLE WATER SUPPLY QUALITY PIPE
9. EACH PROVISION MUST EXTEND ALONG THE SANITARY OR ST. SEWER ON OTHER SIDE OF THE MAIN, A MINIMUM 10 FOOT PERPENDICULAR TO THE WATER MAIN EXTERIOR.
10. WARNING TAPE SHALL BE REQUIRED UNDER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
11. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVWD'S DISTRIBUTION SYSTEM.
12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVWD APPROVAL, AND PROPER NOTIFICATION, BETWEEN 10 PM AND 6 PM SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE "APPROPRIATE" SERVICE FEES BE INSTALLED, WITHOUT LVWD REIMBURSEMENT. TEMPORARY SERVICE FEES MUST HAVE PRIOR LVWD APPROVAL.
13. ALL WATER FACILITY CONSTRUCTION MATERIALS USED ON THE LVWD'S PRE-APPROVED MATERIALS AND MANUFACTURER'S FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED BY THE LVWD.

REV. MAY 31, 1994

WATER CONSTRUCTION NOTES

- INSTALL WATER PIPES PER SUMMERLIN STD. U-20
- INSTALL 12" x 8" REDUCER
 - INSTALL 8" GATE VALVE & BOX
 - INSTALL 8" x 8" TEE
 - INSTALL 2" BLOW-OFF & CAP
 - INSTALL 3/4" WATER METER W/ 1" SERVICE
 - INSTALL FH ASSEMBLY
 - GATE VALVE MUST BE IN CLOSED POSITION PRIOR TO REMOVAL OF CAP
 - 8" x 6" TAPPING SLEEVE AND VALVE

SEWER CONSTRUCTION NOTES

- INSTALL SEWER PIPES PER SUMMERLIN STD. U-20
- INSTALL 48" DIA. SEWER MANHOLE
- STORM DRAIN CONSTRUCTION NOTES**
 INSTALL STORM DRAIN PIPES PER SUMMERLIN STD. U-20
 INSTALL MODIFIED TYPE C DROP INLET

PROJECT NAME: CYPRESS POINTE

This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is NOT APPROVED FOR CONSTRUCTION at this time and this signature does not provide or imply a water commitment.

DATE: 5-30-97

CITY OF LAS VEGAS FIRE NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT, "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3944.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - A. KENNEDY GUARDIAN
 - B. WUELLER A-423 CENTURION
 - C. CLOW MODEL 2546 MEDALLION
3. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMPLETION OF CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
4. CONTRACTOR SHALL PLACE A BLUE-REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3977 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. CALL THE LAS VEGAS BUILDING DEPARTMENT AT 258-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3944 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.
8. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
9. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
10. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.N.I.A. APPROVED.
11. FIRE HYDRANT SPACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED
12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1000 FOOT SPACING TO PROVIDE FOR TRANSPORTATION HAZARDS.
13. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
15. TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE FOUR (4) OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.
16. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
17. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN TWENTY FEET (20'). PROVIDED NO PARKING IS ALLOWED, NOT LESS THAN TWENTY-FOUR FEET (24') IF PARALLEL PARKING IS ALLOWED, NOT LESS THAN TWENTY-FOUR FEET (24') IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET - 6 INCHES.
18. THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
19. A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN UPC 94, SECTION 902.2).
20. ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LINES PUBLIC OR PRIVATE IN EXCESS OF 100 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3944.
21. ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FEET ALONG ALL DESIGNATED FIRE LINES. SIGNS TO BE PLACED ON BOTH SIDES OF ANY ACCESS ROADWAY ARE NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN TEN FEET (10') OR LESS THAN SIX FEET (6') FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT, IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ACCORDANCE TO THE SIGNS.
22. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

REV. 6/95

QUANTITIES

WATER QUANTITIES - PUBLIC	
8" WATER LINE	2,450 LF
8" GATE VALVE & BOX	7 EA
8" x 8" TEE	5 EA
12" x 8" REDUCER	1 EA
STD. FIRE HYDRANT ASSEMBLY	7 EA
12" x 8" GATE VALVE AND 8" TEE	1 EA
8" x 6" TAPPING SLEEVE AND VALVE	1 EA
2" BLOWOFF W/ CAP	4 EA
3/4" WATER METER W/ 1" SERVICE	53 EA
3/4" RPPA	1 EA
SANITARY SEWER QUANTITIES - PUBLIC	
8" SEWER	3,624 LF
48" MANHOLE	16 EA
4" SEWER SERVICE	97 EA
STORM DRAIN QUANTITIES - PUBLIC	
4" TYPE 'A' DROP INLET	2 EA
2.5" TYPE 'B' DROP INLET	1 EA
8.5" MOD. TYPE 'C' DROP INLET	1 EA
14.5" MOD. TYPE 'C' DROP INLET	1 EA
17.5" MOD. TYPE 'C' DROP INLET	1 EA
BEDDING DROP INLET	1 EA
18" CLASS III RCP	87 LF
24" CLASS III RCP	54 LF
36" CLASS III RCP	25 LF
48" CLASS III RCP	60 LF
60" TYPE I MANHOLE	2 EA
STREET LIGHT QUANTITIES - PUBLIC	
100W H.P.S. TYPE 3	16 EA
1 1/4" CONDUIT W/ CONDUCTORS	2,700 LF
1 1/2" PULL BOX	6 EA
125 SERVICE AMP	1 EA
MISCELLANEOUS QUANTITIES - PUBLIC	
STD. STREET SIGN W/ POLE (PER STD. DWG. NO. 250)	6 EA

BENCHMARK:

CITY OF LAS VEGAS BENCHMARK
 QUAD 0144 RIVET & PLATE IN TOP OF CURB NW
 SIDE OF TOWN CENTER DRIVE & SOUTH CIRCLE ISLAND
 2726.19 SUMMERLIN DATUM

BASIS OF BEARINGS:

NORTH 152°34' EAST BEING THE BEARING OF THE CENTERLINE OF ANASAZI DRIVE AS SHOWN BY MAP THEREOF ON FILE IN BOOK 64, PAGE 67 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

ABANDONED VALVE CUT AND CAP

ALL VALVES TO BE ABANDONED IN THE CLOSED POSITION, UNLESS OTHERWISE BY REMOVING A MINIMUM OF THE TOP 12 INCHES OF THE VALVE BOX AND THEN FILLING THE REMAINING PORTION OF THE VALVE BOX WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST 2,000 PSI.

THE CONTRACTOR SHALL CUT THE EXISTING PIPE 3'-4" BEYOND THE ABANDONED VALVE AND INSTALL A CAP WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATION. THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. THE CONTRACTOR SHALL INSTALL A CONCRETE THURST BLOCK AT ALL CAP OR PLUG LOCATIONS.

CURVED SEWER NOTE:

1. CURVED SEWER SHALL BE CONSTRUCTED PER PIPEWIRE TECHNICAL BULLETIN TB-04. CONTRACTOR IS TO USE MANUFACTURER'S RECOMMENDED PIPE FITTINGS TO PREVENT AXIAL JOINT PIPE DEFLECTION. CONTRACTOR MUST CONTROL THE BENDING TO PREVENT EXCESSIVE LOADING, DAMAGE TO THE PIPE AND/OR AXIAL DEFLECTION.
2. CURVED SEWER REQUIRES SPECIAL CONSTRUCTION METHODS AND INSPECTIONS. CONTACT CLV CONSTRUCTION SERVICES PRIOR TO INSTALLATION OF ANY CURVED SEWER.

CYPRESS POINTE
 FUTURE PHASE II

WOODLORE PLACE

LAUREL GLEN DRIVE

PARCEL M

Call before you dig
 1-800-227-2600

SAFETY ALERT
 Call before you dig
 593-6111

REVISIONS

No.	Date	Revised By	Revised For
1	7/26/97	CLV	LATERAL RELOCATIONS PER CLV
2	8/14/97	CLV	SEWER MAIN CORRECTIONS



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THE ARBORS
 PARCEL L

Pulte Homes
 An American Favorite

PROJECT: CYPRESS POINTE - PHASE I
 DISCUSSION: UTILITY PLAN

SHEET 6 OF 16

AS-BUILT

14375 27704 31916

3074-4514-1