

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3677.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY GUARDIAN
B. MURPHY A-423 CENTURIAN
C. FLOW METER 2544 METALION
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. THE CONTRACTOR SHALL PLACE A BLUE REFERENCE MARKER AT THE CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3677 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. CALL THE LAS VEGAS BUILDING DEPARTMENT AT 229-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF THE CURBS AND HYDRANTS AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE, PER ORDINANCE #3677, 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 HYDRANTS. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE ANY WORK BEGINNING.
8. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
10. FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 SPRINKLERED
11. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
13. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
14. 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.
15. 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 EXCEPTION IN UFG 91, SECTION 10.203)
16. ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LINES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH, SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. (SEE ORDINANCE #3677)
17. 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.

APPROVED

[Signature]
CITY OF LAS VEGAS FIRE MARSHAL

DATE
12-8-95

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 PM THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
2. ALL WORK SHALL CONFORM TO THE LVVWD'S STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
8. THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
A. MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED ON THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE. THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
A. POTABLE WATER SUPPLY QUALITY MATERIAL
B. ENCASEMENT WITH FOUR (4) INCH CONCRETE (MINIMUM)
C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE
EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM TEN (10) FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
B. WARNING TAPE SHALL BE REQUIRED OVER 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.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRIBUTION SYSTEM.
11. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152, FORTY-FOUR (48) HOURS PRIOR TO PICKUP.
12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEES BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEES MUST HAVE PRIOR LVVWD APPROVAL.
13. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PREAPPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

APPROVED

LAS VEGAS VALLEY WATER DISTRICT

DATE

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. 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.

UTILITY LOCATIONS SHOWN HEREON 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 LOCATION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (2")

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. 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.

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY 1-10"

THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 20B. 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.

NOTES

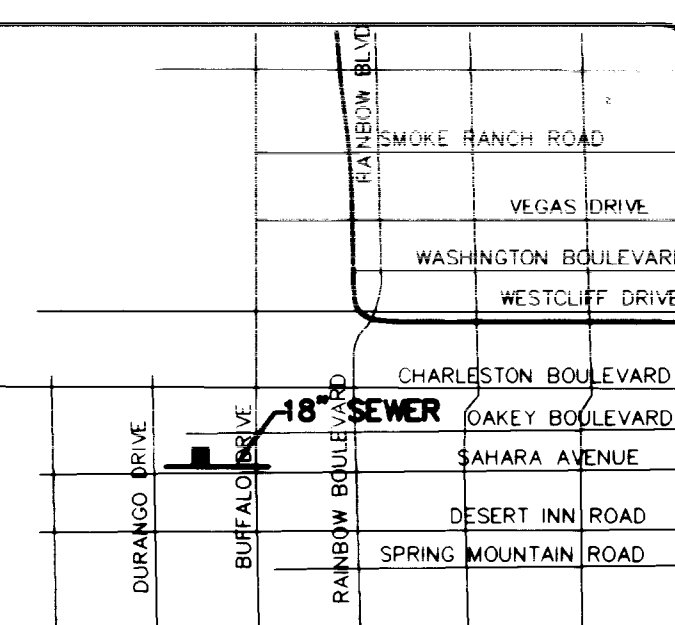
1. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY UTILITIES OR EXISTING IMPROVEMENTS DAMAGED BY THIS CONSTRUCTION WILL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR HIS ENGINEER.
2. ADJUST ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AS NECESSARY TO ACCOMMODATE CONSTRUCTION.



ESTIMATE OF UTILITY QUANTITIES

WATER QUANTITIES				SEWER QUANTITIES			
ITEM	QTY	UNIT		ITEM	QTY	UNIT	
2" WATER METER	1	EA		6" SEWER LINE	135	LF	
2" RPPA	1	EA		6" CLEAN OUT	2	EA	
2" WATER LINE	212	LF					
6" WATER LINE	120	LF					
FIRE HYDRANT ASSEMBLY	2	EA					
10" CDDA	1	EA					

PROJECT SITE



GRAPHIC SCALE

(IN FEET)

1 inch = 30 ft

UTILITY CONSTRUCTION NOTES

1. INSTALL 2" DOMESTIC METER PER UDACS PLATE NO. 1D WITHIN LVVWD EASEMENT.
2. CONNECTION POINT FOR WATER SERVICE. SEE ARCH. PLANS.
3. CONNECTION POINT FOR SEWER SERVICE. SEE ARCH. PLANS.
4. CONNECTION POINT FOR FIRE SERVICE. SEE ARCH. PLANS.
5. INSTALL 2" WATER SERVICE SCH 40 PVC.
6. TIE TO EXISTING 6" SEWER LINE.
7. INSTALL 2" RPPA PER UDACS PLATE NO. 11A (LVVWD).
8. INSTALL 6" FIRE SERVICE LINE. FIRE SERVICE CONTRACTOR TO VERIFY SIZE, LOCATION, AND TYPE OF PIPE.
9. INSTALL 10" DOUBLE CHECK DETECTOR ASSEMBLY PER UDACS PLATE NO. 20B WITHIN LVVWD EASEMENT.
10. PROPOSED 15'x20' LVVWD EASEMENT.
11. CONSTRUCT FIRE HYDRANT PER "UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA" DRAWING NO. 516.
12. CONSTRUCT 90° BEND.
13. MAKE CONNECTION TO EXISTING 8" PVC WITH 2" SERVICE SADDLE.
14. INSTALL 8"x6" REDUCER.
15. INSTALL 2" IRRIGATION SCH 40 PVC.
16. CUT OR LENGTHEN EXISTING 8" PVC AND INSTALL 8" 90° ELBOW WITH 8"x10" REDUCER.

17. SLEEVE WATER LINES (DOMESTIC & FIRE) 20' (2" RPPA) THE TRANSVERSE SHOWN ON BOTH SIDES. SLEEVE PER LVVWD STANDARD.

CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2250 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.

BASED ON:

SQUARE FOOTAGE 29,250 sq

LARGEST AREA BETWEEN AREA SEPARATION WALLS N/A

HEIGHT 17.0 FT

TYPE OF CONSTRUCTION V-N

EXPOSURES

SPRINKLER SYSTEM YES

OCCUPANCY B-2

ROOF CONSTRUCTION

LEGEND

FF	FINISHED FLOOR
TC	TOP OF CURB
FS	FINISHED SURFACE
FL	FLOW LINE
TW	TOP OF SIDEWALK
EX.	EXISTING
(XX.XX)	EXISTING SPOT ELEVATION

OWNER/DEVELOPER

PAN PACIFIC CONSTRUCTION COMPANY
2955 EAST SUNSET ROAD, SUITE 101
LAS VEGAS, NV 89120 456-4562

BENCHMARK

CITY OF LAS VEGAS BENCHMARK # 1LV10/5SES
RIVET AND PLATE IN TOP OF CURB, NW RETURN
OF SAHARA AVENUE AND DURANGO DRIVE.
VEGAS BLVD.
ELEVATION = 2662.615 FEET OR 811.567 METERS
NAVD 1988 DATUM.

BASIS OF BEARING

N 88°29'02" W BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SW1/4) OF THE SOUTHWEST QUARTER (SW1/4) OF SECTION 4, T. 21 S., R. 60 E., M.D.B. & M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN IN BOOK 60, PAGE 47 OF PLATS IN THE RECORDER'S OFFICE OF CLARK COUNTY, NEVADA.

SEWER CONTRIBUTION
AVERAGE FLOW = 11,270 GPD
PEAK FLOW = 37,191 GPD

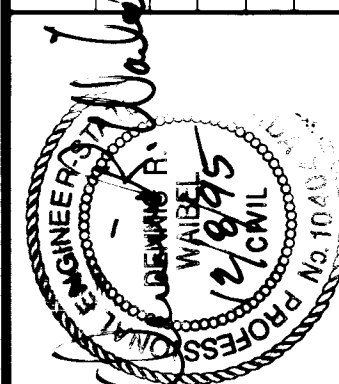
APPROVED FOR CONSTRUCTION ESN 010

[Signature]
LAS VEGAS VALLEY WATER DISTRICT
DATE 12/19/97

FOUND BRASS CAP IN
W. 1/16 CORNER SECTION 4
T. 21 S., R. 60 E., M.D.B. & M.

REVISIONS

CHD	APPD	Date	No.
		11/05/94	1
		12/17/97	2



DESIGNED: REL
DRAWN: REL
CHECKED: REL
JOB NO: 95-1689
SCALE: 1"=30'
HORIZ: VERT:

Carter Burgess
Consultants in Engineering, Architecture,
Planning and Construction
2955 East Sunset Road, Suite 105
Las Vegas, NV 89120
(702) 998-1007 Fax (702) 798-7056

LAKES PACIFIC BUSINESS CENTER

UTILITY PLAN

PROJECT: LAKES PACIFIC BUSINESS CENTER
DESCRIPTION: UTILITY PLAN
SHEET: 2 OF 2

