Avoid cutting underground utility lines. It's costly.

Call before you Dig

1-800-227-2600

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING APPROVAL OF THE PLANS, NOTICE SHALL BE GIVEN TO THE LVVWD CUSTOMER SERVICE DEPARTMENT (870-4194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION, AND 24 HOURS PRIOR TO AN INSPECTION.
2. CALL BEFORE YOU DIG : 1-800-227-2600.
3. ALL WORK SHALL CONFORM TO LVVWD LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS.
4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA.
5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS SHALL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY SHALL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
6. COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLATES.
7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR A.C.P. AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	ACP	DUCTILE IRON SLIP JOINT	DUCTILE IRON MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	2.5 DEGREES	2.5 DEGREES
14-16 INCH	2.0 DEGREES	1.5 DEGREES	1.5 DEGREES
18-24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

ON P.V.C. PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 16 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, AND 9 INCHES FOR 10" AND 12" PIPE.
IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURER'S RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY GUTTERS.
10. DETECTOR TAPE SHALL BE REQUIRED IN ACCORDANCE WITH STANDARD PLATE No. 27 WHERE INDICATED, AND AS FOLLOWS:
    a) OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
    b) OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
11. ALL WATER MAINS SHALL BE PRESSURE TESTED AT 200 P.S.I. FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.
12. ALL WATER MAINS SHALL BE DISINFECTED, FLUSHED, AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED, PRIOR TO THE CONNECTION OF THE WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICT'S SYSTEM.
13. CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM L.V.V.W.D. CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

GENERAL NOTES - SEWER

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND 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. THESE STANDARDS SHALL APPLY TO ALL CONSTRUCTION.
3. SEWER MAINS ONLY TO BE LAID IN SEWER TRENCHES.
4. ALL LATERALS TO BE LAID AT NOT LESS THAN MINIMUM SLOPES AS SHOWN IN THESE STANDARDS.
5. 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.
6. SOILS TESTING SHALL BE DONE IN ACCORDANCE WITH SECTION 3.11 OF THESE STANDARDS.
7. ALL EXFILTRATION, INFILTRATION, AIR TESTING AND TELEVISING OF LINES SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
8. CUT SHEET'S MUST BE SUBMITTED TO THE AGENCY BEFORE CONSTRUCTION WILL BE PERMITTED TO START.
9. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
10. ALL LATERALS TO BE LAID TO MINIMUM 2 PERCENT SLOPE AND SHALL CONFORM TO STANDARDS FOR CONSTRUCTION OF OFFSITE IMPROVEMENTS IN THE CLARK COUNTY AREA.

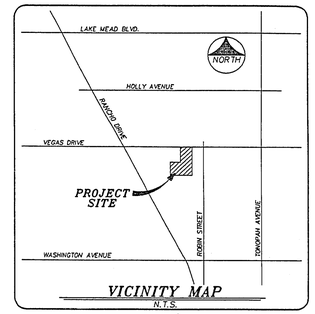
INSTALLATION OF DOUBLE DETECTOR CHECK AND VAULT

THE DOUBLE DETECTOR CHECK ASSEMBLY AND VAULT WITH NON-TRAFFIC BEARING COVER(S) MUST BE INSTALLED IN ACCORDANCE WITH THE DISTRICT'S STANDARD PLATE No. 20, AND WITH STANDARD VAULT DRAWING No. C-475, LATEST REVISION.

ANY BLOCKWALL OR OTHER FENCE MATERIAL MUST BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT, SO AS TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S) FROM THE ADJACENT RIGHT-OF-WAY.

CITY OF LAS VEGAS FIRE DEPT. 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 No. 2545.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE
   A - KENNEDY GUARDIAN
   B - MUELLER A-423 CENTURION
   C - CLOW MODEL 2545 MEDALLION
3. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE 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 No. 3545 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 HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE No. 3545 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. 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 F.M. APPROVED.
10. FIRE HYDRANT SPACING:
    RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
    COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED,
    - 400 FEET 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 5' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, 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 OF 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 EXCEPTIONS IN U.F.C. 88, SECTION 10.207).
16. ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANES PUBLIC OR PRIVATE IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE No. 3545.



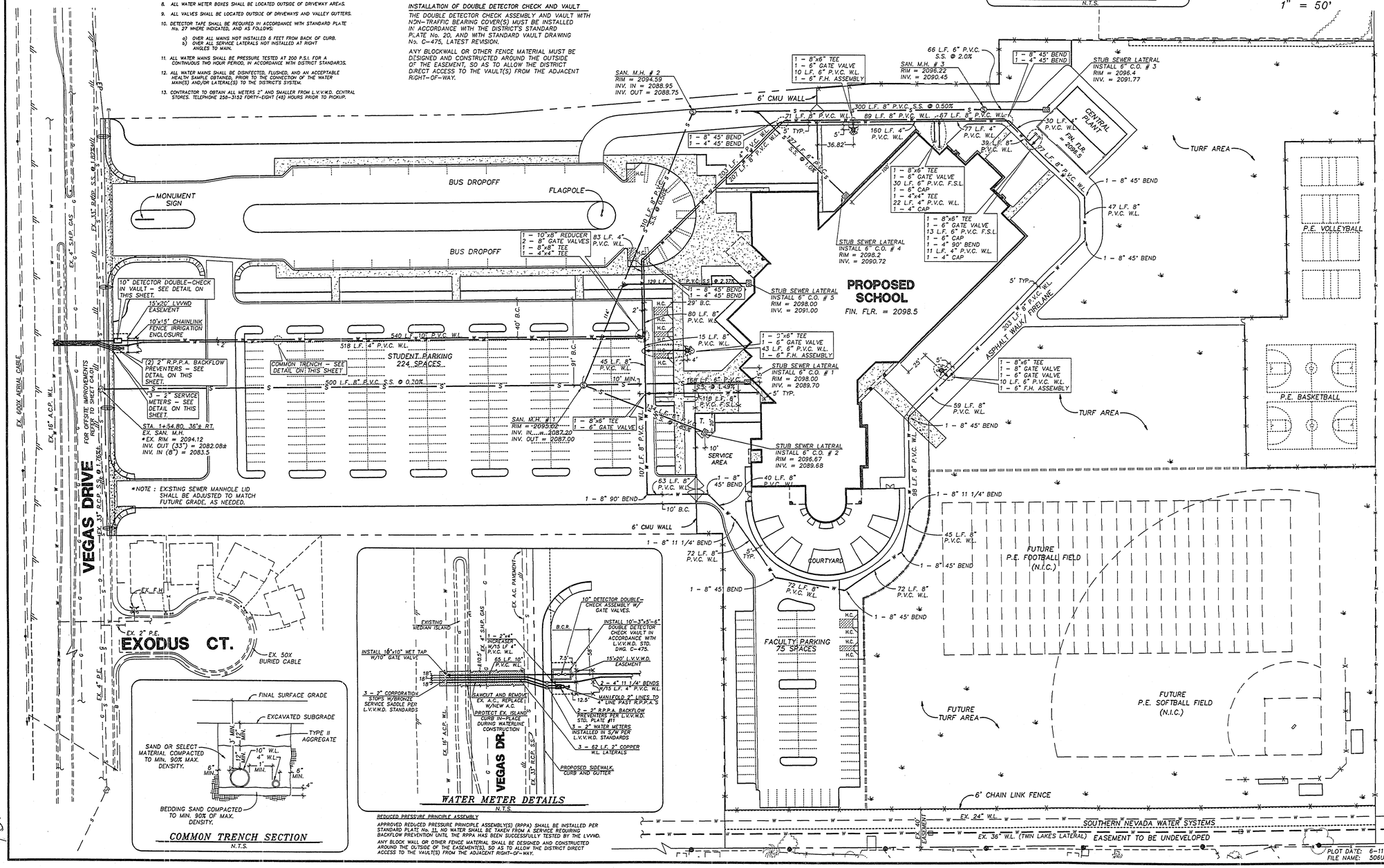
VICINITY MAP
N.T.S.

BENCH MARK

CLARK COUNTY BENCHMARK NO. 8, STATION 7C01-20SWS DRIVE RIVET IN ALUMINUM PLATE IN TOP OF CURB OF THE NORTHEAST CORNER OF VEGAS DR. AND RANCHO DR. NEAR THE PC OF RANCHO DR.

ELEVATION = 2114.749

1" = 50'



REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) (RPPA) SHALL BE INSTALLED PER STANDARD PLATE No. 11, NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE RPPA 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), SO AS TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S) FROM THE ADJACENT RIGHT-OF-WAY.

PLOT DATE: 6-11-93
FILE NAME: 506UP

REVISIONS

REV.	DESCRIPTION	DATE	BY	APPROVAL
1	REVISED FIRE FLOW	7/6/93	KMM	

FIRE FLOW INFORMATION - C.L.V. FIRE DEPARTMENT

THE FIRE FLOW REQUIREMENT IS ~~2500~~ 2375 GPM AT 20 PSI RESIDUAL PRESSURE. THIS REQUIREMENT IS BASED UPON SQUARE FOOTAGE FOR TYPE II, 1-HRCONSTRUCTION. THE FLOW INDICATED IS THE MINIMUM ALLOWED BY CLVFD.

Daniel Bowerman 6/8/93
CITY OF LAS VEGAS FIRE DEPARTMENT — DATE

APPROVED FOR CONSTRUCTION:
A.F.A.T. SHEET C5.01
LAS VEGAS VALLEY WATER DISTRICT — DATE 7/26/93

C.L.V. FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS ~~2500~~ 2375 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.

BASED ON: TABLE NO. 111-A-A, UFC
SQUARE FOOTAGE 105,000
LARGEST AREA BETWEEN AREA SEPARATION WALLS
HEIGHT 45'
TYPE OF CONSTRUCTION TYPE II - ONE HR.
EXPOSURES
SPRINKLER SYSTEM YES
OCCUPANCY
ROOF CONSTRUCTION

SEAL: REGISTERED PROFESSIONAL ENGINEER, NEVADA, CIVIL, No. 8435, 6/11/93

CCSD PROJECT NO.	0490
CCSD REVIEW	-
APPROVED BY	-
DATE	-
DATE	06-07-93
DRAWN BY	MDP
CHECKED BY	KMM
SUBMITTAL	100%
A/E PROJECT NO.	91-538

Church Engineering of Nevada, Inc.
Consulting Engineers, Planners, Surveyors
6500 W. Charleston Blvd.
Las Vegas, Nevada 89102
(702) 878-8244
7197-506

KITTRELL GARLOCK and ASSOCIATES AIA ARCHITECTS
470 SOUTH DECATUR BLVD. • SUITE B-5 • LAS VEGAS, NV. • 89103 • (702) 367-6900

CLARK COUNTY SCHOOL DISTRICT
SPECIAL PROJECTS 4260 EUCALYPTUS ANNEX 799-5025 LAS VEGAS, NEVADA 89121

PROJECT: ACADEMY FOR ADVANCED TECHNOLOGIES
JURISDICTION: CITY OF LAS VEGAS - CLARK COUNTY, NEVADA

DRAWING TITLE: UTILITY PLAN

SHEET NO. 9 of 11

C5.01

715-88

90-101