



LAS VEGAS BOULEVARD
(PUBLIC)
HWY BK L5

FOURTH STREET
(PUBLIC)
CLV# 107V2288

CLARK AVENUE
(PUBLIC)
CLV# 107V589

UTILITY REFERENCES
SEWER: REFER TO SHEET P1.00
HVAC: REFER TO SHEET M1.01
TELECOM SERVICE: REFER TO SHEET EMBARQ
IRRIGATION: REFER TO SHEET L4.01

PRIVATE FIRE SERVICE MAIN STANDARD NOTES

- A PRIVATE FIRE SERVICE MAIN IS THAT PIPE AND ITS APPURTENANCES ON PRIVATE PROPERTY.
 - BETWEEN A SOURCE OF WATER AND THE BASE OF THE RISER (NOT OVER 6 IN. ABOVE THE FLOOR) FOR WATER-BASED FIRE PROTECTION SYSTEMS.
 - BETWEEN A SOURCE OF WATER AND THE BASE ELBOW OF PRIVATE HYDRANTS OR MONITOR NOZZLES.
 - THE NEVADA STATE FIRE MARSHALL HAS DETERMINED THAT THE UNDERGROUND PORTIONS OF A SPRINKLER SYSTEM ARE DEFINED AS: THAT PORTION OF THE PIPING BETWEEN A SOURCE OF PUBLIC WATER (USUALLY IN A PUBLIC STREET) AND THE BASE OF THE SPRINKLER RISER (NOT OVER 6 IN. ABOVE THE FLOOR).
- THE UNDERGROUND CONTRACTOR INSTALLING THE PRIVATE FIRE SERVICE MAIN SUPPLYING ANY AUTOMATIC FIRE SPRINKLER SYSTEM MUST BE LICENSED BY THE STATE OF NEVADA, STATE FIRE MARSHALL DIVISION FOR THE UNDERGROUND INSTALLATION OF SPRINKLER
- THE INSPECTION AND TESTING OF ALL PRIVATE FIRE SERVICE MAINS SHALL BE WITNESSED AND APPROVED BY THE FIRE PREVENTION DIVISION.
- ALL VALVES CONTROLLING CONNECTIONS TO WATER SUPPLIES AND TO SPRINKLER PIPING SHALL BE LISTED INDICATING VALVES OR AS APPROVED BY THE FIRE PREVENTION DIVISION.
- ALL VALVES CONTROLLING CONNECTIONS TO WATER SUPPLIES AND TO SPRINKLER PIPING SHALL BE PROTECTED FROM FREEZING WHEN EXPOSED TO TEMPERATURES LESS THAN 40 F. FREEZE PROTECTION SHALL BE PROVIDED IN SUCH A MANNER THAT IT WILL LAST THE LIFETIME OF THE VALVE.
- ALL FIRE DEPARTMENT CONNECTIONS (FDC) FOR FIRE SPRINKLER SYSTEMS SHALL BE LOCATED WITHIN 100 FEET OF FIRE HYDRANT.
- ALL WORK SHALL BE IN ACCORDANCE WITH NFPA 24, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.

DOUBLE CHECK DETECTOR ASSEMBLY (DCCA) (1) 1"
THE DOUBLE CHECK DETECTOR ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 11C. 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 FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"
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 LVVMD.

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.

EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENTS IS 2,250 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.
BASED ON:
SQUARE FOOTAGE: 37,803 SQUARE FEET
OCCUPYING SQUARE FOOTAGE: 29,256 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: N/A
MAX BUILDING HEIGHT: 38'-4"
NUMBER OF STORIES: 1 FLOORS
TYPE OF CONSTRUCTION: V-B COMMERCIAL
OCCUPANCY: FULL AUTOMATIC FIRE SYSTEM: YES
REVIEWED BY: LAS VEGAS FIRE DEPARTMENT DATE: 7/31/07

NOTE:
PER LAS VEGAS PROJECT STANDARDS MANUAL, DIVISION 2, UNDERGROUND UTILITY TRACING REQUIRES TRACE WIRE ON ALL NON-CONDUCTIVE PIPE.

NOTE:
"IF THERE IS A CONFLICT BETWEEN CONTRACT DRAWINGS AND/OR SPECIFICATIONS, THE LAS VEGAS PROJECT STANDARDS SHALL PREVAIL."

APPROVED FOR CONSTRUCTION
LAS VEGAS FIRE DEPARTMENT
Las Vegas Valley Water District
Date: 8-07-07

QUANTITY ESTIMATES (ON-SITE)

WATER	
1	8" 90° BEND _____ 7 EA
2	8" 8" MJ TAPPING SLEEVE (PER UDACS PLATE 22) _____ 1 EA
3	8" TAPPING VALVE (PER UDACS PLATE 22) _____ 1 EA
4	8" CAP AND BLOW OFF (PER UDACS PLATE 4A) _____ 1 EA
5	INSTALL PIV (W/ TAMPER SWITCH) _____ 1 EA
8" PVC WATER (PRIVATE FIRE LINE)(RATED FOR 200PSI) _____ 302.90 LF	

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 27°54'36" EAST - THE CENTERLINE OF LAS VEGAS BOULEVARD FROM STATION "B" 1077+00.00 POT TO STATION "B" 1155+93.04 POT (AND FREMONT AVENUE) BEARS NORTH 27°54'36" EAST PER NEVADA DEPARTMENT OF HIGHWAY DRAWINGS, PROJECT NUMBER F005-1(3), AS SHOWN BY THAT RECORD OF SURVEY ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 67 OF SURVEYS, AT PAGE 79.
104723
PROJECT BENCHMARK
PROJECT DATUM: CITY OF LAS VEGAS BENCH MARK NO. CLVBM FREMONT 5 - RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHEAST RETURN OF FREMONT AND LAS VEGAS BOULEVARD.
NAVDBS ELEVATION: 2007.32 METERS (6588.70 FEET)

REVISED SEWER AND ROOF DRAIN LOCATION PER ARCHITECT-
REFERENCE ARCHITECT REVISION #1 8/8/07
DATE BY
8-06-07 J.P.
REVISION

CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7550 FAX (702) 362-2597 WEB WWW.VTNV.COM
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

UTILITY PLAN
FIFTH STREET SCHOOL

CLV FIFTH STREET SCHOOL
REHABILITATION
BUILDING DEPARTMENT SUBMITTAL

SCALE: 1"=20'
1"=20'
VERT. 1"=20'

DRAWN BY: SUPRA
DESIGNED BY:
CHECKED BY:
PROJECT NO: 6716

7-26-07
SHEET
7 OF 11 SHEETS
DRAWING NO. CLV# 540 005

PROFESSIONAL ENGINEER STATE OF NEVADA
AARON M. AWAMQHA
LICENSE NO. 15078
8/6/07

Call before you Overhead 1-702-227-2829
Call before you Dig 1-800-227-2600

Underground
1-702-455-7911
CLARK COUNTY UTILITY OPERATOR
1-702-228-0811
PREVENT AN ACCIDENT. PREVENT A FINE OR IMPROVEMENT.

HANSEN# 18021

FSN.076