

**WATER MAIN JOINT DEFLECTION (PVC, 4'-24')**

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.06.2, FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

**NOTE**

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 27

**NOTE**

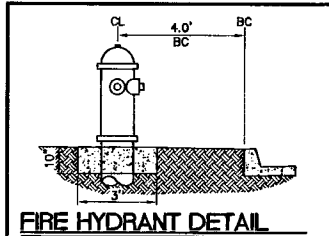
ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO TITLE 19.12.040.

**BASIS OF BEARING**

NORTH 86°55'18" EAST, BEING THE BEARING OF THE CENTERLINE OF ROME BOULEVARD AS SHOWN ON A MAP ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE AS FILE 108, PAGE 81 OF SURVEYS.

**BENCHMARK**

FOUND CITY OF LAS VEGAS BM RIVET AND PLATE IN CONCRETE CYLINDER AT THE SW CORNER OF BRADLEY AND ROME, SLV90 2456 2309.12(ft) 703.8215(m) NAVD88



ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

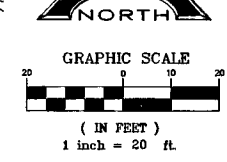
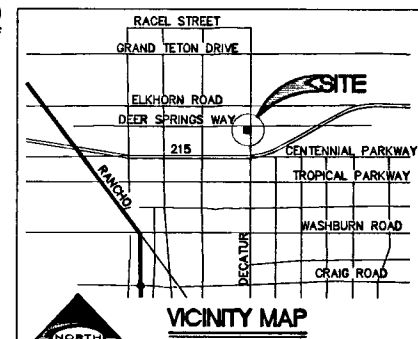
**DUAL REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 2'**

APPROVED DUAL REDUCER PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE No. 118. 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. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

**FIRE FLOW CALCULATIONS (TYP. BUILDING)**

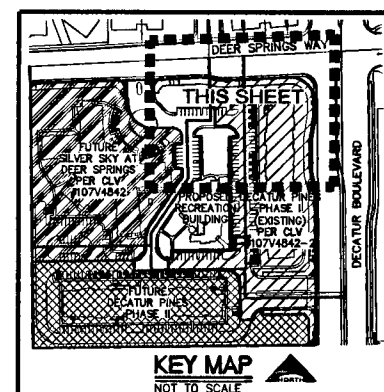
FIRE FLOW REQUIREMENT IS: 1,500 GALLONS PER MINUTE AT 20 PS RESIDUAL PRESSURE. BASED ON:

- SQUARE FOOTAGE: 5222 S.F.
- LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: 5222 S.F.
- BUILDING HEIGHT: 35 FEET
- NUMBER OF STORIES: 1 FLOORS
- TYPE OF CONSTRUCTION: V-C-N
- OCCUPANCY: A-3
- FULL AUTOMATIC SPRINKLERS SYSTEM: YES



**OWNER/DEVELOPER**  
NEVADA H.A.N.D.  
298 WAIN SPRINGS ROAD STE. 101  
LAS VEGAS, NEVADA 89119-4212  
TEL: (430-9025)  
CONTACT: ROBERT FIEBLEMAN

**SOILS REPORT**  
GEOTEK, INC. - NEVADA  
DATED DECEMBER 6, 2006  
GEOTEK PROJECT #7624-LV6



**WATER CONSTRUCTION NOTES AND QUANTITIES**

	PUBLIC	PRIVATE
INSTALL 3" PVC DOMESTIC WATER	0 LF	341.17 LF
INSTALL 3"x2" REDUCER (AFTER RPPA)	0 EA	1 EA
INSTALL 3" 90° BEND	0 EA	3 EA
INSTALL DUAL 2" RPPA PER UDACS 11B	1 EA	0 EA
INSTALL 2" BRASS WATERLINE	8.12 LF	0 LF
INSTALL 2" METER PER UDACS PLATE 1D	1 EA	0 EA
INSTALL 2" SERVICE SADDLE PER UDACS 1D	1 EA	0 EA
INSTALL 2" TYPE "K" COPPER WATERLINE	65.67 LF	0 LF
INSTALL 8" 45° BEND	0 EA	1 EA
INSTALL FIRE HYDRANT ASSEMBLY (INCL: TEE, VALVE, LATERAL, RISER, THRUST BLOCKS, AND ALL ASSORTED HARDWARE) PER UDACS PLATE 7	0 EA	2 EA
INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS AT FIRE HYDRANTS	0 EA	2 EA
INSTALL 8" 22-1/2" BEND PER UDACS PLT. 5	0 EA	2 EA
INSTALL 8"x8" PVC FIRE	0 LF	327.34 LF
INSTALL FIRE DEPARTMENT CONNECTION	0 EA	1 EA
INSTALL 8"x8" TEE PER UDACS PLATE 5	0 EA	1 EA
INSTALL 8"x8" REDUCER PER UDACS PLATE 5	0 EA	1 EA
INSTALL 8" 90° BEND PER UDACS PLATE 5	0 EA	1 EA
INSTALL 8" PVC FIRE	0 LF	95.45 LF

**LEGEND AND ABBREVIATIONS**

- APN = ASSESSOR'S PARCEL NUMBER
  - SD = STORM DRAIN
  - DW = DOMESTIC WATER
  - STLT = STREET LIGHT
  - RF = FINISH FLOOR
  - TCO = TOP CLEAN OUT
  - PVC = POLY VINYL CHLORIDE
  - ROW = RIGHT OF WAY
  - STA = STATION
  - SW = SEWER
  - PP = POWER POLE
  - WL = WATER LINE
  - CLV = CITY OF LAS VEGAS
  - SS = SANITARY SEWER
  - EX = EXISTING
  - SW = SIDEWALK
  - INV = INVERT OF PIPE
  - TYP = TYPICAL
- CONSTRUCTION NOTE**  
RIGHT-OF-WAY LINE/PROPERTY LINE  
STREET CENTERLINE  
LIMITS OF EXISTING/PROPOSED/FUTURE  
SAW CUT PAVEMENT  
EXISTING STREETLIGHT  
EXISTING FIRE HYDRANT  
EXISTING WATER VALVE  
EXISTING SANITARY SEWER MANHOLE  
EXISTING STORM DRAIN MANHOLE  
FIRE RISER PUMP  
FIRE DEPARTMENT CONNECTION

**DISCLAIMER NOTE**

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD 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.

Call before you Dig  
Avoid cutting underground utility lines. It's costly.

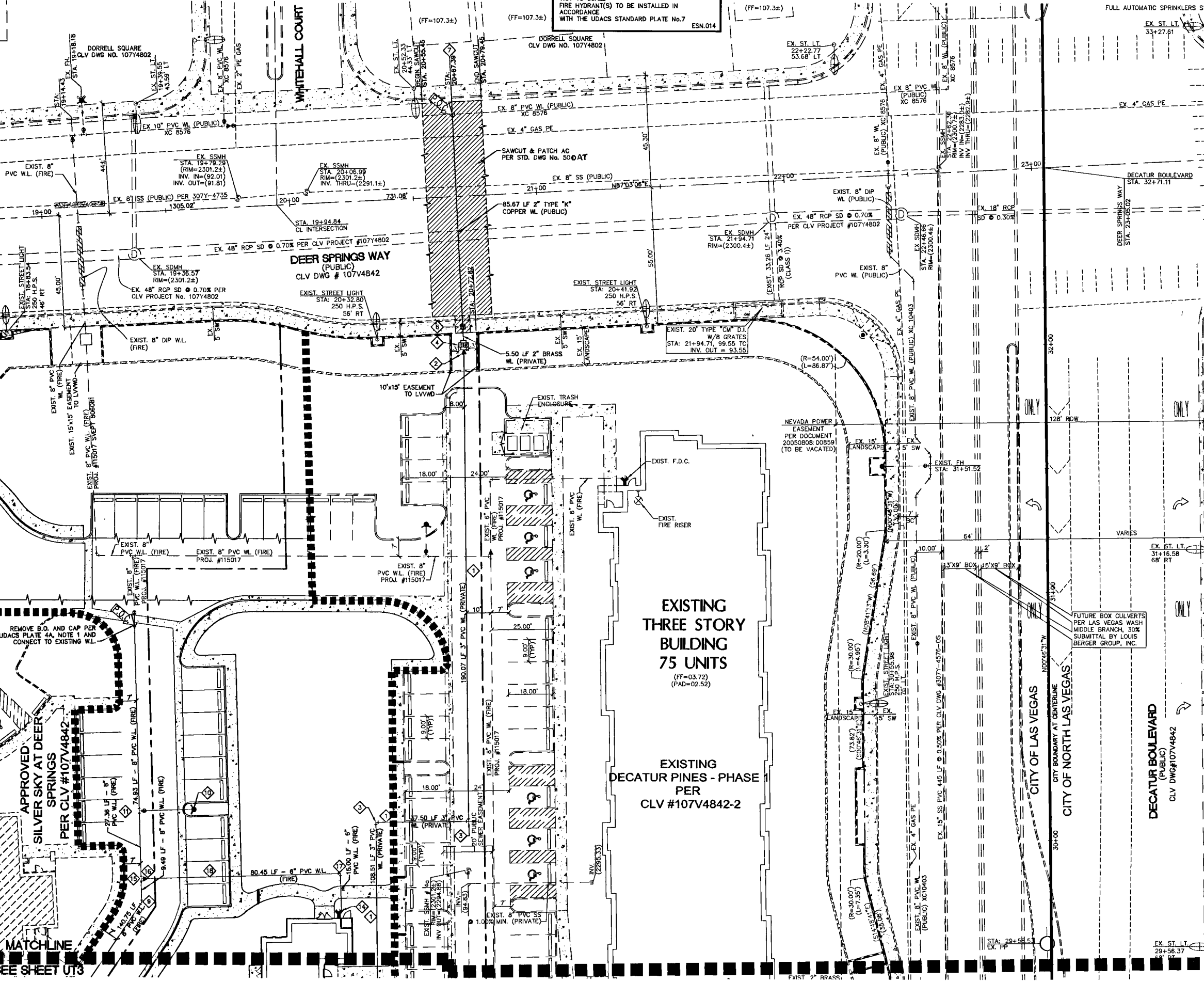
1-800-227-2600  
CLARK COUNTY TRAFFIC OPERATIONS  
1-702-455-7544

Call before you OVERHEAD  
Avoid overhead power line contact

1-702-227-2929  
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Underground  
Avoid hitting underground traffic signal system and street light system conduits. It's costly.

1-702-455-7511  
CLARK COUNTY TRAFFIC OPERATIONS  
1-702-452-5300  
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM



APPROBATED APPR

REV NO. REVISION DESCRIPTION

**NEVADA HAND.**  
LAS VEGAS, NEVADA 89101-1207  
TEL: (702) 739-3345 CONTACT: ROBERT FIEBLEMAN

**L.R. NELSON CONSULTING ENGINEERS, INC.**  
8765 West Russell Road  
Suite 200  
Las Vegas, Nevada 89118  
(702) 799-7978  
(702) 491-2266 FAX

**UTILITY PLAN 1**

**TITLE**  
DECATUR PINES - REC. BLDG.  
DEER SPRINGS WAY AND DECATUR BLVD.  
CITY OF LAS VEGAS

DRAWN BY: AUGUST 09  
DESIGNED BY: AUGUST 09  
CHECKED BY: AUGUST 09  
PROJECT NO: 1527-001-071  
SCALE: 1"=20'  
N/A

SEAL  
JAMES A. YANNEY  
REGISTERED PROFESSIONAL ENGINEER  
NO. 16108  
CIVIL  
7/10/09

SHEET  
10 OF 14 SHEETS  
UT2  
CLV DRAWING NO.  
107V4842-R6c