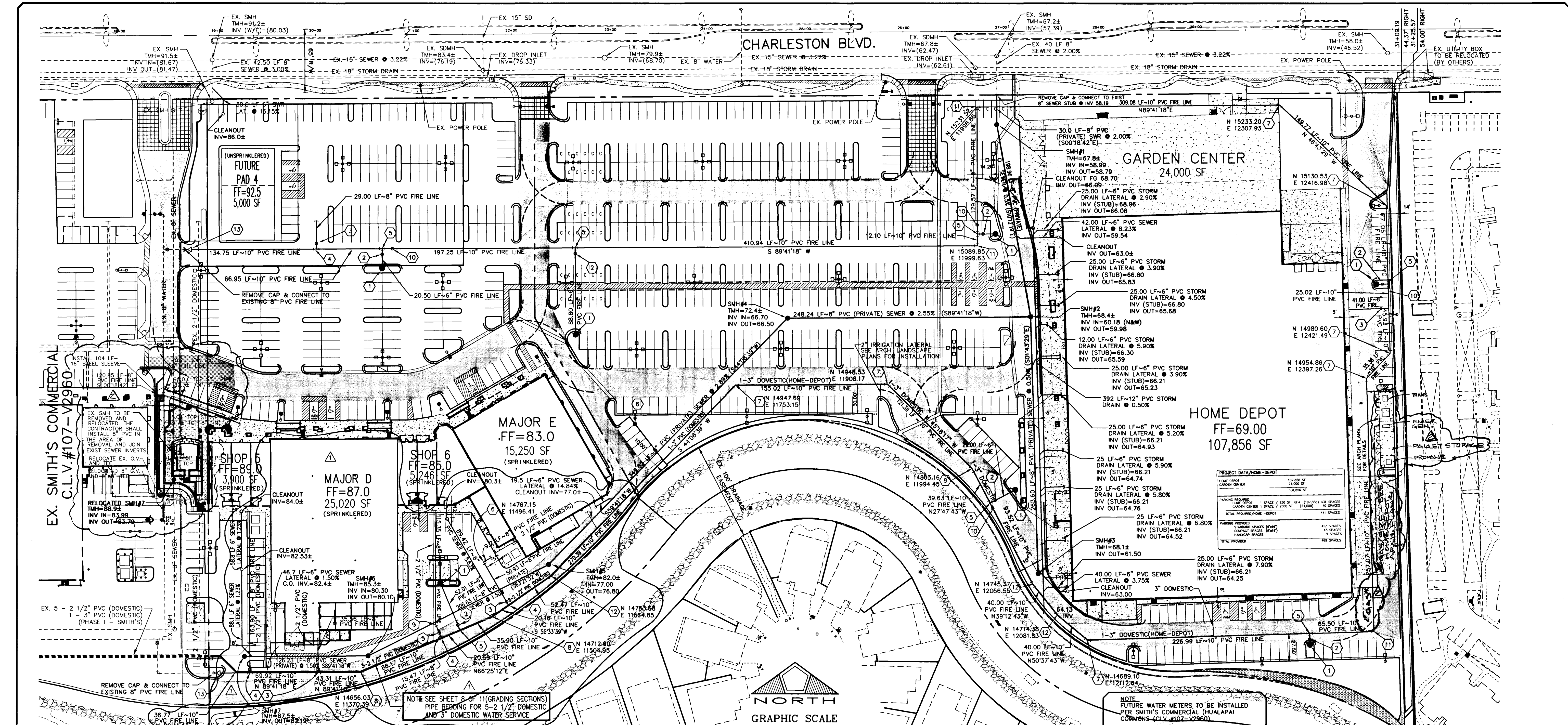




WATER CONSTRUCTION NOTES	
FOR THIS SHEET	
10" PVC FIRE LINE	3,179 LF
8" PVC FIRE LINE	466 LF
6" PVC FIRE LINE	191 LF
1. INSTALL FIRE HYDRANT ASSEMBLY, COMPLETE PER U.D.S. PLATE NO. 7. INSTALL BOLLARDS TO PROTECT ON-SITE HYDRANTS WHERE NEEDED. (MAINTAIN CLEARANCES PER FIRE DEPARTMENT)	7 EA.
2. INSTALL 6" GATE VALVE	7 EA.
3. INSTALL 8" GATE VALVE	6 EA.
4. INSTALL 10"x10"x8" TEE	6 EA.
5. INSTALL 10"x10"x6" TEE	7 EA.
6. INSTALL 8"-90° BEND	2 EA.
7. INSTALL 10"-45° BEND	5 EA.
8. INSTALL 10"-22 1/2° BEND	3 EA.
9. INSTALL 8"-11 1/4° BEND	1 EA.
10. INSTALL 10" GATE VALVE	4 EA.
11. INSTALL 10"-90° BEND	3 EA.
12. INSTALL 10"-11 1/4° BEND	3 EA.
13. INSTALL 8"x10" REDUCER	2 EA.

NOTE TO CONTRACTOR:
QUANTITIES SHOWN ARE APPROXIMATIONS ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

ENGINEER'S NOTES

- CONTRACTOR TO VERIFY LOCATION AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- SEE MECHANICAL PLANS FOR LOCATIONS, SIZES AND DEPTHS OF ALL ON-SITE UTILITIES AT THE PROPOSED BUILDINGS
- SEE ELECTRICAL PLAN FOR ON-SITE LIGHTING AND POWER SUPPLY
- SEE LANDSCAPE PLANS FOR ON-SITE IRRIGATION
- NOTIFY ENGINEER FOR ANY DISCREPANCIES IMMEDIATELY
- PROVIDE ALL CLEANOUTS IN PAVED AREAS WITH VALVE BOXES, TRAFFIC BEARING UDS AND CONCRETE COLLARS.
- THE DOMESTIC WATER SERVICE AND FIRE SERVICE FOR THIS PHASE IS PROVIDED BY THE IMPROVEMENT PLANS ENTITLED "PECCOLE RANCH, PHASE II SMITH'S COMMERCIAL", C.L.V.# 107-V2960.
- ALL OFF-SITE (PUBLIC) STREETLIGHTS ARE EXISTING.
- ALL SEWER AND WATER CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH U.D.S. AND THE DESIGN & CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION TO PROVIDE MINIMUM CLEARANCES.

FIRE HYDRANT INSTALLATION

FIRE HYDRANT(S) TO BE INSTALLED IN ACCORDANCE WITH THE UDACS STANDARD PLATE NO. 7. ESN.014

BENCHMARK

CITY OF LAS VEGAS BENCHMARK # 0LV00 31SSW6, BEING A RIVET AND PLATE IN TOP OF CURB ON CHARLESTON BLVD., 1690' WEST OF GRAND CANYON DRIVE, NORTH CURB LINE AT DROP INLET.
ELEVATION = 874.0618 METERS (NAVD 88)
ELEVATION = 2867.651 U.S. SURVEY FEET (COMPUTED NAVD 88)

REDUCE PRESSURE PRINCIPLE ASSEMBLY

(1) 1 1/2"
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 LVWD.
ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENTS(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

Sanitary Sewer Calculation

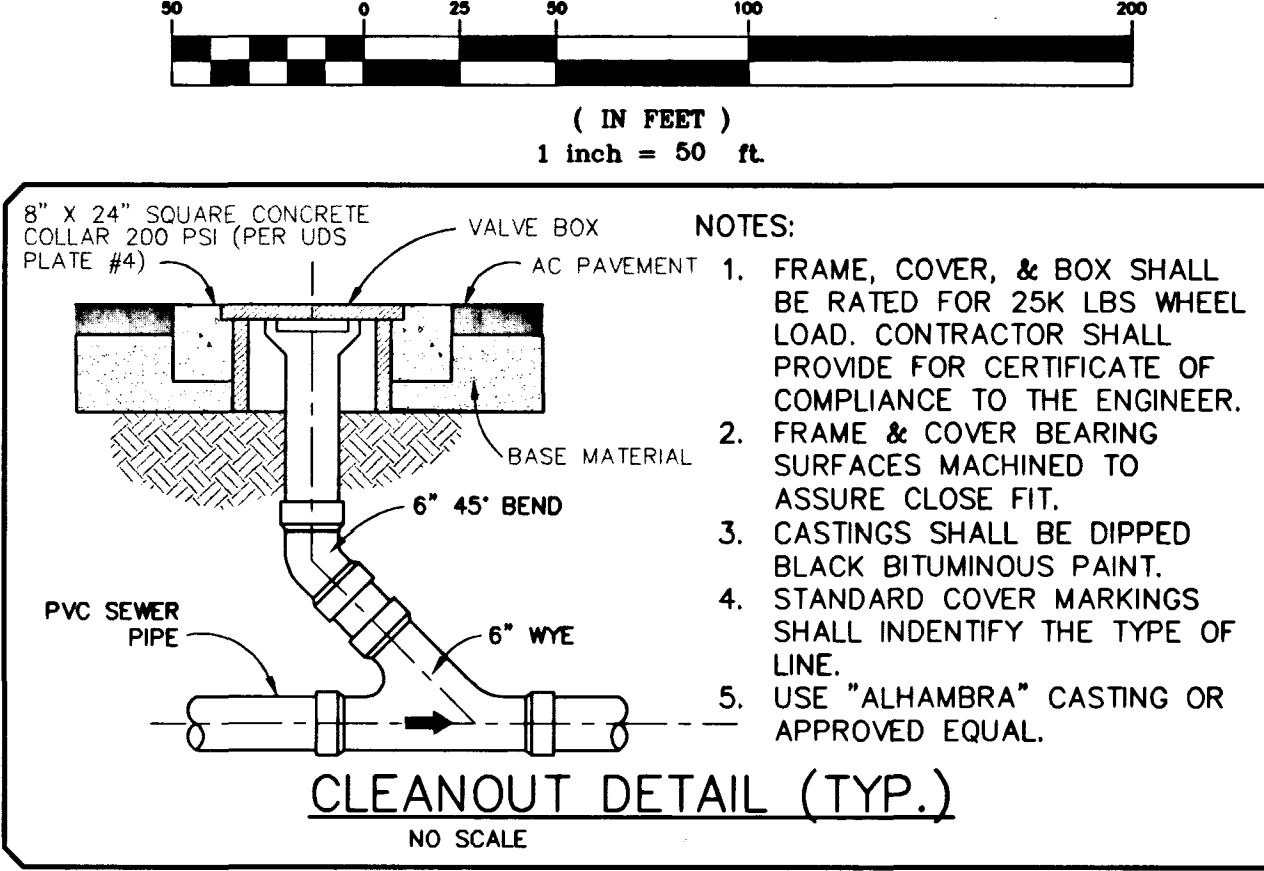
PEAK FLOW = .03 FT./SEC
DAILY AVERAGE = .02 MGD

Call before you Dig.

1-800-227-2600
UNDERGROUND SERVICE (USA)

Call before you Overhead

1-702-593-6111
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



UTILITY LEGEND

EXISTING WATER LINE
PROPOSED WATER LINE
SERVICE WATERLINE
PROPOSED FIRE HYDRANT
W/6" LATERAL & 6" G.V.
EXISTING SEWER MANHOLE
PROPOSED SEWER MANHOLE
PROPOSED SEWER LATERAL
EXISTING STORM DRAIN MANHOLE
PROPOSED STORM DRAIN MANHOLE
0" LIP DRIVEWAY
GATE VALVE
REDUCER
STREET LIGHT SERVICE POINT
FIRE ACCESS ROAD

FIRE LANE

RED
BLACK
RED
BLACK

NOTE

APPROVAL FOR THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LAS VEGAS VALLEY WATER DISTRICT.

FIRE FLOW CALCULATIONS

THE FIRE FLOW REQUIREMENT IS: 3,900 GALLONS PER MINUTE
20 PSI RESIDUAL PRESSURE.

BASED ON:
SQUARE FOOTAGE: 107,856 SF.
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: NONE
BUILDING HEIGHT: 35
NUMBER OF STORIES: 1
TYPE OF CONSTRUCTION: V-NON RATED
OCCUPANCY: N/A
FULL AUTOMATIC FIRE SPRINKLER SYSTEM: YES

REVIEWED BY: Amy Chang
DATE: 7/7/99

NOTE

APPROVAL FOR THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LAS VEGAS VALLEY WATER DISTRICT.

