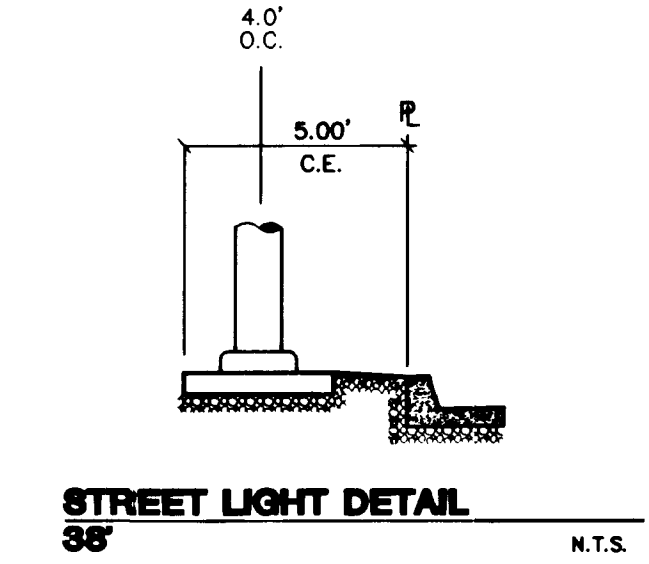
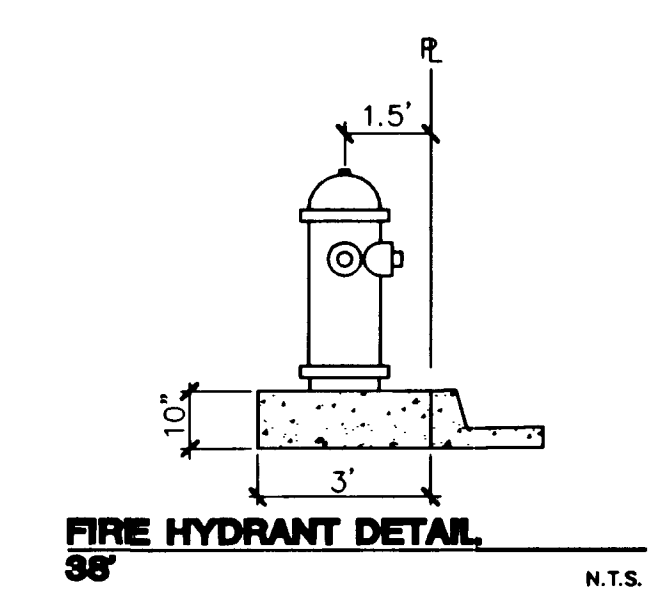
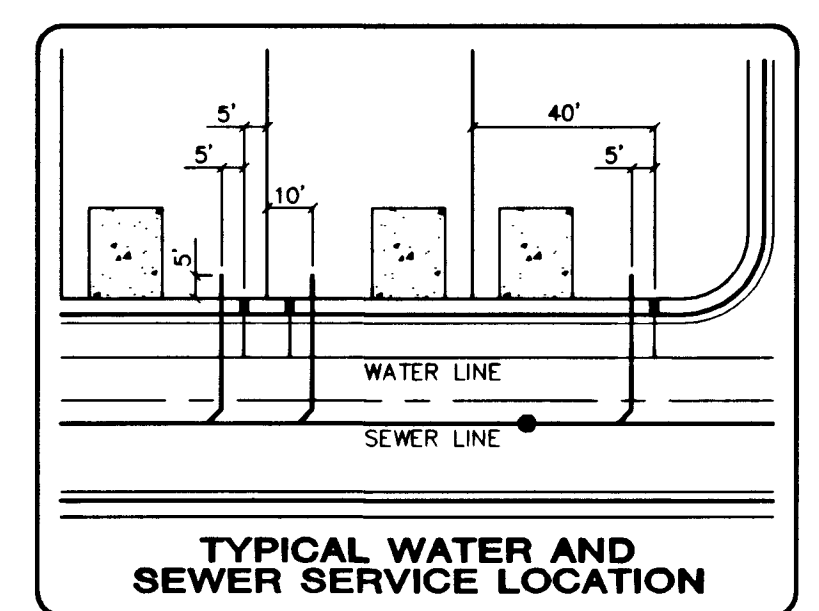
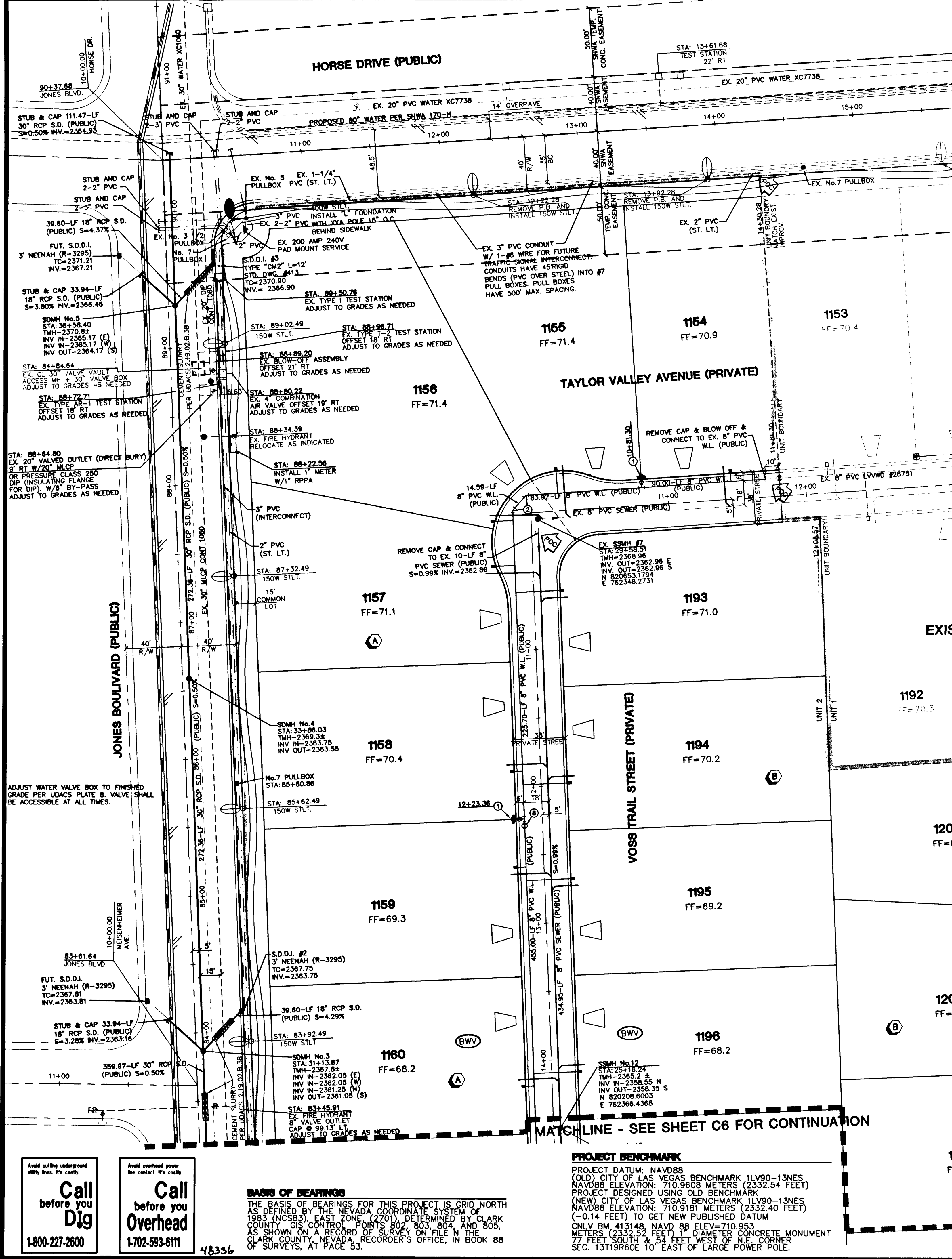




DISCLAIMER NOTE
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPPA)
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 EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

NOTE
ALL PRIVATE STREETS ARE P.U.E. ALL PUBLIC SEWER EASEMENTS AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER MANUFACTURE INSTRUCTIONS.

CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING, BUT NOT LIMITED TO AV/AR, ACCESS MANWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CATHODIC PROTECTION TEST STATIONS, RECTIFIERS, AND AV/AR'S MUST BE RELOCATED TO THE SIDEWALK PER SNWA STANDARDS AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO NOTIFY SOUTHERN NEVADA WATER AUTHORITY, DEVELOPMENT PLAN REVIEW, AT (702) 862-3444 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.

RELOCATION OF FIRE HYDRANTS
(EXTENSION OF EXISTING LATERAL)
THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN, EXTEND THE EXISTING LATERAL AS REQUIRED, AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. RELOCATIONS WHERE THE LATERAL CANNOT BE EXTENDED SHALL BE TREATED AS NEW INSTALLATIONS. FIRE HYDRANTS SHALL BE TESTED PRIOR TO RELOCATION UNDER THE DIRECTION OF LVWD INSPECTION.

EXISTING IRON MOUNTAIN RANCH VILLAGE 8 UNIT 1
CLV DWG No. 307Y-4604-8-1

ESTIMATE OF QUANTITIES UNIT 1 / LEGEND

	PUBLIC	PRIVATE
WATER		
1" FIRE HYDRANT ASSEMBLY (PER UDACS PLATE No. 7)	6 EA.	0 EA.
1" 45° ELBOW	4 EA.	0 EA.
1" 22° ELBOW	0 EA.	0 EA.
1" 11° ELBOW	0 EA.	0 EA.
1" 8" x 8" TEE	1 EA.	0 EA.
1" CAP W/ 2" B.O. ASSEMBLY (PER UDACS PLATE No. 4)	1 EA.	0 EA.
1" 6" REDUCER	0 EA.	0 EA.
1" 6" GATE VALVE	4 EA.	0 EA.
1" METER (PER UDACS PLATE 10)	38 EA.	0 EA.
1" METER W/ 1" RPPA (PER UDACS PLATE 10 & 11A)	1 EA.	0 EA.
6" PVC WATER MAIN (PUBLIC)	0 LF.	0 LF.
8" PVC WATER MAIN (PUBLIC)	2274 LF.	0 LF.
8" DIP WATER MAIN (PUBLIC)	0 LF.	0 LF.
SEWER		
STANDARD MANHOLE PUBLIC	5 EA.	0 EA.
4" SEWER LATERALS (PRIVATE)	0 LF.	930 LF.
4" SEWER WYES (PRIVATE)	0 EA.	0 EA.
8" BACKWATER VALVES (PRIVATE)	2 EA.	0 EA.
8" SEWER MAIN (PUBLIC)	1844 EA.	0 EA.
SEWER CONTRIBUTION (BASED ON 38 LOTS)		
AVERAGE DAILY FLOW =	0.0095 MGD.	
PEAK FLOW (PF=3.5)=	0.03325 MGD.	
DRIVEWAY LOCATION (SCHEMATIC ONLY)	38 EA.	
POINT OF CONNECTION	7 EA.	

NOTE
INSTALL 3" PVC CONDUIT WITH 1-1/8" WIRE FOR FUTURE TRAFFIC SIGNAL INTERCONNECT. CONDUITS TO HAVE 45° RIGID BENDS (PVC OVER STEEL) INTO #7 PULLBOXES. PULLBOXES TO HAVE 500' MAXIMUM SPACING.

LAS VEGAS FIRE DEPARTMENT
FIRE FLOW REQUIREMENT IS 1,500 GALLONS/MIN. AT 20 LBS./SQ. IN. RESIDUAL.
BASED ON:
SQUARE FOOTAGE: 2600
LARGEST AREA BETWEEN SEPERATION WALLS:
HEIGHT: 2 STORY
TYPE OF CONSTRUCTION:
EXPOSURES: 10' MIN.
SPRINKLER SYSTEM: NONE
OCCUPANCY: SINGLE FAMILY RESIDENCE
ROOF CONSTRUCTION: CONCRETE TYP.
REVIEWED BY: [Signature]
DATE: 12/12/02
PROVIDE FIRE LANE IDENTIFICATION PER CITY ORD. 3677

APPROVAL:
LAS VEGAS VALLEY WATER DISTRICT DATE
CITY OF LAS VEGAS FIRE MARSHAL DATE 12/13/02
NEVADA POWER COMPANY DATE
NEVADA POWER COMPANY APPROVAL IS ONLY FOR THE PLACEMENT AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATION, AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATION.
[Signature] DATE 12/12/02
SOUTHERN NEVADA WATER AUTHORITY DATE

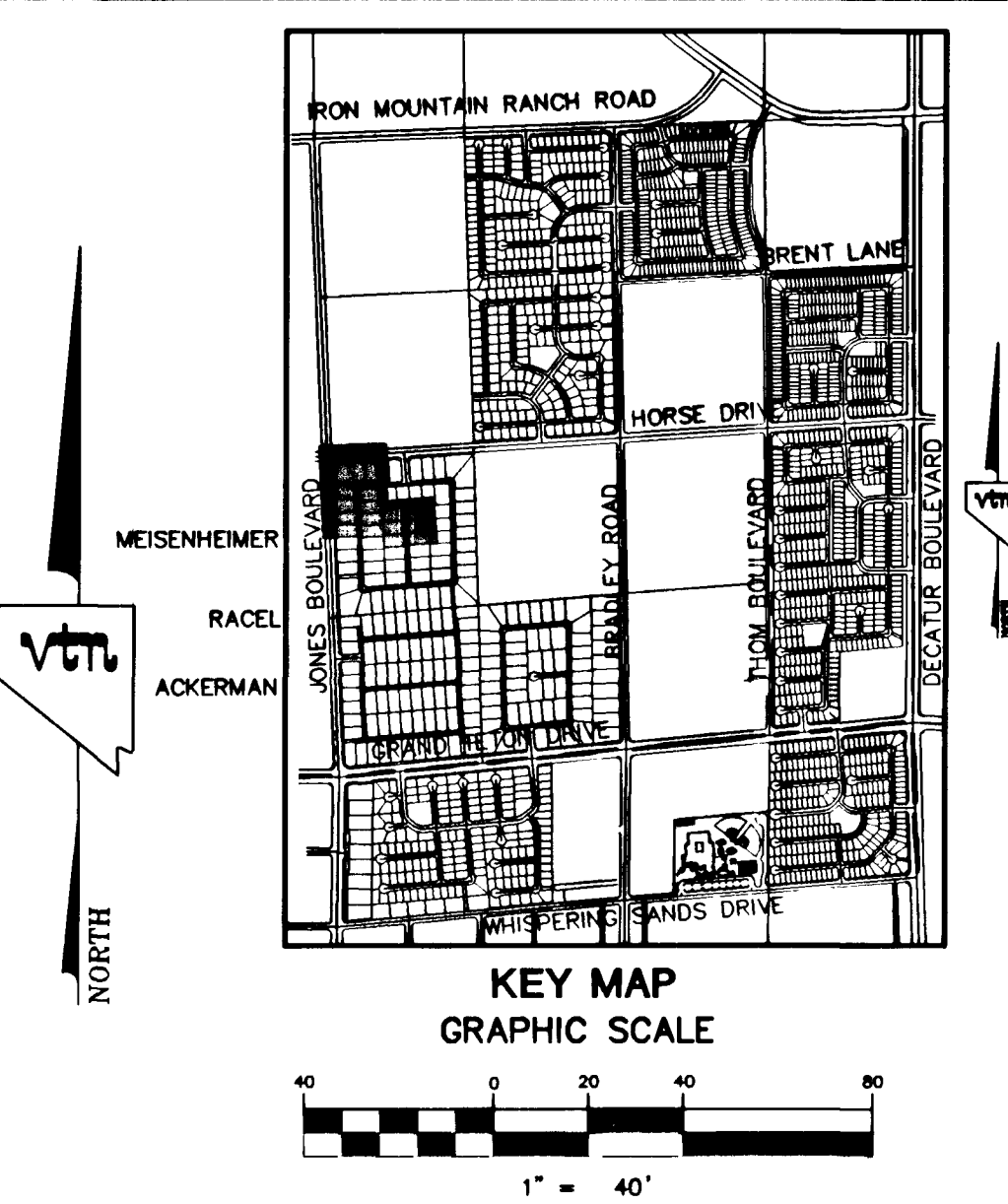
SNWA APPROVAL IS VALID FOR ONE (1) YEAR FROM THE SIGNATURE DATE. IF CONSTRUCTION WITHIN THE EASEMENT OR RESTRICTED PIPE SAFETY ZONE IS NOT COMPLETE, PLANS MUST BE RESUBMITTED TO SNWA FOR APPROVAL.

Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111

PROJECT BENCHMARK
PROJECT DATUM: NAVD88
(OLD) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES
NAVD88 ELEVATION: 710.9608 METERS (2332.54 FEET)
PROJECT DESIGNED USING OLD BENCHMARK
(NEW) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES
NAVD88 ELEVATION: 710.9181 METERS (2332.40 FEET)
(-0.14 FEET) TO GET NEW PUBLISHED DATUM
CNLV BM 413148, NAVD 88 ELEV=710.953 METERS (2332.52 FEET) 1" DIAMETER CONCRETE MONUMENT
7.7 FEET SOUTH & 54 FEET WEST OF NE CORNER
SEC. 13T19R60E 10' EAST OF LARGE POWER POLE.

THE BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NAD83) EAST ZONE (2701), DETERMINED BY CLARK COUNTY GIS CONTROL POINTS 802, 803, 804, AND 805, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY NEVADA RECORDER'S OFFICE, IN BOOK 88 OF SURVEYS, AT PAGE 33.



CITY OF LAS VEGAS

KB HOME
780 PLAT ROAD, SUITE F
LAS VEGAS, NV 89118
(702) 614-2500

MASTER UTILITY PLAN

IRON MOUNTAIN RANCH VILLAGE 8 UNIT 2

DRAWN BY: MKD JULY 2002
DESIGNED BY: RMS JULY 2002
CHECKED BY: KFN JULY 2002
PROJECT NO: 5027-02
SCALE: 1"=40' HORIZ. N/A VERT.

PROFESSIONAL ENGINEER STATE OF NEVADA
KENNETH L. NICHOLSON
10539 YUTHEEN RD.
LAS VEGAS, NV 89122
EXPIRES 12-31-03
SHEET 5 OF 24 SHEETS
DRAWING NO. 307Y-4604-8-2