

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1)-3/4":

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A OR, 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.

ESN 028 2/15/97

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE.

FUTURE SERVICE LATERALS AND METERS LOTS 31-36

INSTALLATION OF SERVICE LATERALS(1") FOR FUTURE LOTS SHALL BE INSTALLED PER THE UDACS PLATE 1B. IF ANY OF THE SERVICE LATERALS TO BE INSTALLED FOR FUTURE LOTS ARE INCORRECTLY LOCATED OR ARE NOT USED FOR ANY REASON WHEN THE LOTS ARE DEVELOPED, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICTS STANDARDS AND AT THE DEVELOPER'S EXPENSE.

NOTE:

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE IN THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

FIRE FLOW DATA

FIRE FLOW REQUIREMENT IS 1500 GALLONS/MIN. AT 20 LBS./SQ.IN. RESIDUAL

BASED ON:

SQUARE FOOTAGE: 2,750 SF
LARGEST AREA BETWEEN SEPARATION WALLS: 2,750 S.F. ALEXANDER ROAD AND BUFFALO DRIVE
HEIGHT: 2 STORY
TYPE OF CONSTRUCTION: V-N

SPRINKLER SYSTEM: NONE
OCCUPANCY: SINGLE FAMILY RESIDENCE
ROOF CONSTRUCTION: CONCRETE TILE

REVIEWED BY: SA

DATE: 8/17/00
PROVIDE FIRE LANE IDENTIFICATION PER CITY ORD. 3677

BENCHMARK

PROJECT VERTICAL DATUM: NAVD88
CITY OF LAS VEGAS BENCHMARK 1LV00-4SES
NAVD88 ELEV: 713.8497 METERS (2342.02 FEET)

RIVET AND PLATE IN TOP OF CURB, NORTHWEST RETURN OF

BASIS OF BEARINGS:

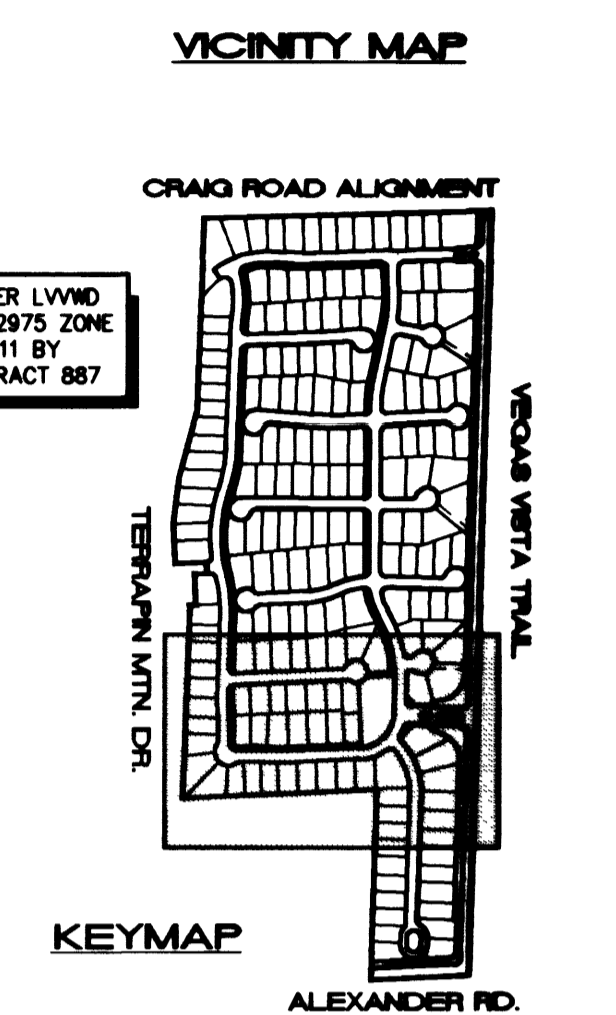
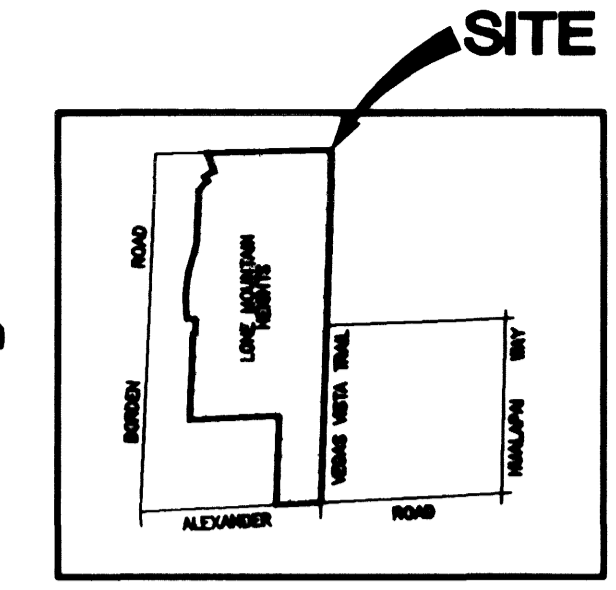
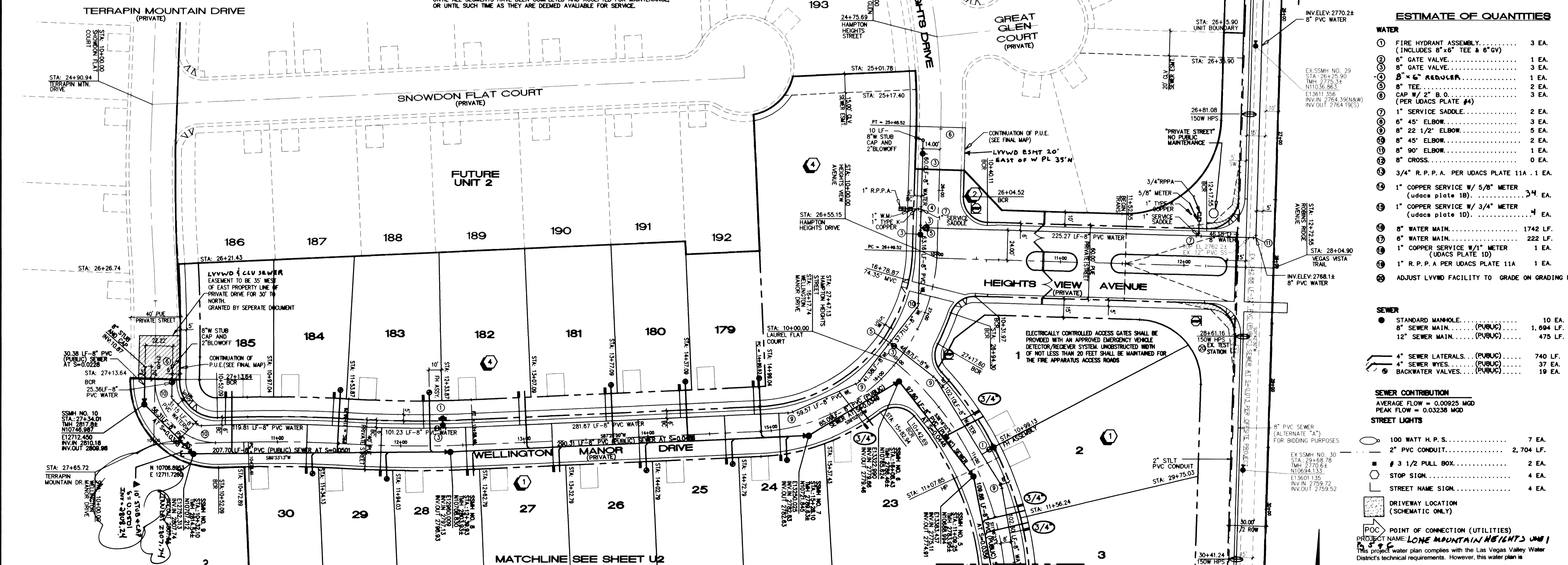
NORTH 87°08'14", BEING THE BEARING OF THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 1, TOWNSHIP 20 SOUTH, RANGE 59 EAST, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE, IN FILE 89 OF SURVEYS, AT PAGE 3.

LAS VEGAS VALLEY WATER DISTRICT NOTES

- No work shall begin until the water plans have been released for construction by the LVVWD. Following water plan approval, 48 hours notice shall be given to the LVVWD Communication Support Center (258-7171) prior to the start of construction. Notice must be given by 2:00 p.m. the business day prior to a LVVWD inspection. When requesting inspections, please refer to the Project # identified above.
- All work shall conform to LVVWD's Standard Plans, Drawings, and Specifications and to the Uniform Design and Construction Standards for Water Distribution Systems (UDACS), latest edition.
- All work except as modified by these plans or by Note 2, shall be done in accordance with the most current draft or edition of the Uniform Standard Specifications for Public Works Construction Offsite Improvement, Clark County Area.
- A single pipe material shall be used throughout the project unless otherwise approved by the LVVWD.
- All service laterals two (2) inches in diameter and smaller shall be copper tubing with LVVWD approved service saddles.
- All water meter boxes shall be located outside of driveway areas.
- All valves shall be located outside of driveways, valley and curb gutters.
- The following requirements must be met in the event a water line and sanitary or storm sewer line cross:
 - A minimum eighteen (18) inch vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the sanitary or storm sewer line must be constructed with one of the following or, as shown on these plans:
 - Potable Water supply quality material.
 - Encasement, with four (4) inch concrete (minimum)
 - Steering with potable water supply quality pipe.
 - Each provision must extend along the sanitary or storm sewer, on either side of the main, a minimum 10 foot distance perpendicular to the water main exterior.
- Warning tape shall be required over all mains, all six (6) inch diameter and larger service laterals, and any service lateral not installed perpendicular to the main in accordance with Standard Plate No. 27.
- All water facilities shall be filled, disinfected, pressure tested, flushed, filled and an acceptable water sample obtained, prior to connection to the LVVWD's distribution system.
- The contractor must obtain all meters two (2) inches and smaller from LVVWD Central Stores. Telephone 258-3152 forty-eight (48) hours prior to pickup.
- Construction may interrupt service, with LVVWD approval and proper notification, between the hours of 10 p.m. and 6 a.m., Sunday through Thursday. Circumstances may require temporary service feeds be installed, without LVVWD reimbursement. Any temporary service feed must have prior LVVWD approval.
- All water facility construction materials used must be as listed on the LVVWD's Pre-Approved Materials and Manufacturers Listing for New Facilities, latest revision, or specifically approved on these plans.

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWN STREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.



ESTIMATE OF QUANTITIES

WATER	
1 FIRE HYDRANT ASSEMBLY (INCLUDES 8"x6" TEE & 6"GV)	3 EA.
2 6" GATE VALVE	1 EA.
3 8" GATE VALVE	3 EA.
4 8" x 6" REDUCER	1 EA.
5 8" TEE	2 EA.
6 CAP W/ 2" B.O. (PER UDACS PLATE #4)	3 EA.
7 1" SERVICE SADDLE	2 EA.
8 45' ELBOW	3 EA.
9 22 1/2' ELBOW	5 EA.
10 8" 45' ELBOW	2 EA.
11 8" 90' ELBOW	1 EA.
12 8" CROSS	0 EA.
13 3/4" R.P.P.A. PER UDACS PLATE 11A	1 EA.
14 1" COPPER SERVICE W/ 5/8" METER (UDACS PLATE 1B)	34 EA.
15 1" COPPER SERVICE W/ 3/4" METER (UDACS PLATE 1D)	4 EA.
16 8" WATER MAIN	1742 LF.
17 6" WATER MAIN	222 LF.
18 1" COPPER SERVICE W/ 1" METER (UDACS PLATE 1D)	1 EA.
19 1" R.P.P.A. PER UDACS PLATE 11A	1 EA.
20 ADJUST LVVWD FACILITY TO GRADE ON GRADING PLAN	

SEWER	
1 STANDARD MANHOLE (PUBLIC)	10 EA.
2 8" SEWER MAIN (PUBLIC)	1,694 LF.
3 12" SEWER MAIN (PUBLIC)	475 LF.
4 4" SEWER LATERALS (PUBLIC)	740 LF.
5 BACKWATER VALVES (PUBLIC)	19 EA.

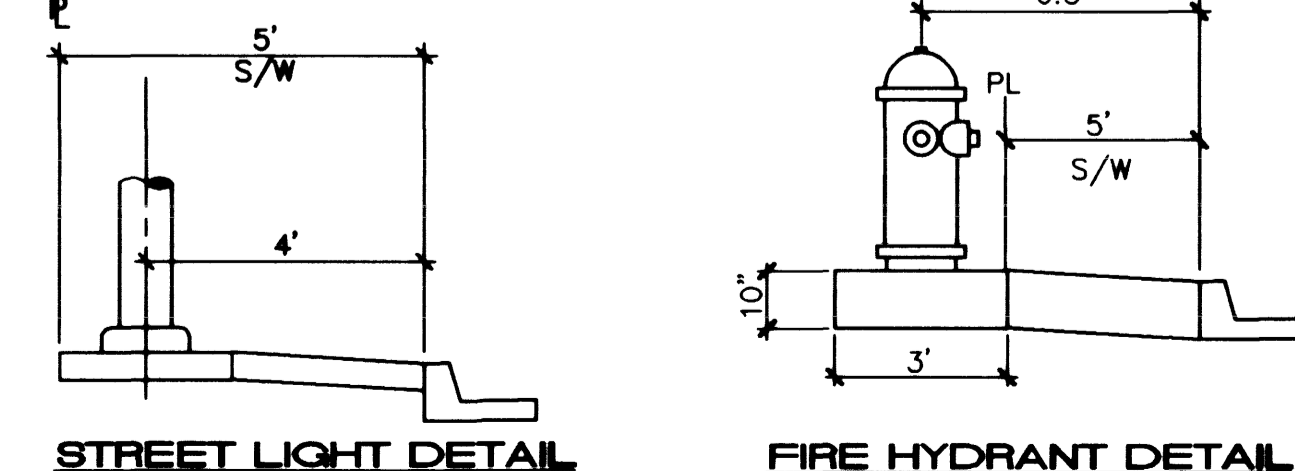
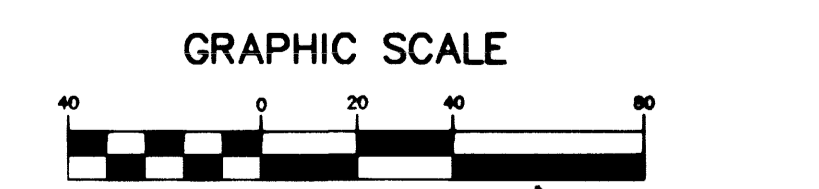
SEWER CONTRIBUTION	
AVERAGE FLOW = 0.00925 MGD	
PEAK FLOW = 0.03238 MGD	

STREET LIGHTS	
1 100 WATT H. P. S. FOR BIDDING PURPOSES	7 EA.
2 2" PVC CONDUIT	2,704 LF.
3 # 3 1/2" PULL BOX	2 EA.
4 STOP SIGN	4 EA.
5 STREET NAME SIGN	4 EA.

- DRIVEWAY LOCATION (SCHEMATIC ONLY)
- POINT OF CONNECTION (UTILITIES)

PROJECT NAME: LONE MOUNTAIN HEIGHTS UNIT 1
This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is NOT APPROVED FOR CONSTRUCTION at this time and this signature does not provide or imply a water commitment.

Signature: *Laura E. ...*
DATE: 9/17/00
CITY OF LAS VEGAS SEWER NOTES
SEE SHEET 3



APPROVAL:

Signature: *[Signature]*
LAB VEGAS VALLEY WATER DISTRICT 5.0
DATE: 9/17/00
Signature: *[Signature]*
CITY OF LAS VEGAS FIRE MARSHALL
DATE: 8/29/00

STREET LIGHT NOTE

ALL STREET LIGHTING INSTALLATION EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE IMPROVEMENT STANDARDS, DEPARTMENT OF PUBLIC WORKS, CLARK COUNTY, NEVADA, AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA. ALL POLES TO BE GALVANIZED. (PUBLIC ONLY-VEGAS VISTA TRAIL AND ALEXANDER ROAD)

NOTE: APPROVAL OF THESE PLANS FOR THE SERVICE LATERALS AND METERS TO FUTURE LOTS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE TO THESE PROPERTIES.

Call before you Dig OVERHEAD
1-800-227-2600
1-702-593-6111
25564 25917

KAUFMAN AND BROAD
750 PILOT ROAD, SUITE F
LAS VEGAS, NV 89119
(702) 614-2500

MASTER UTILITY PLAN

LONE MOUNTAIN HEIGHTS UNIT 1

PROJECT NO: 5778
SHEET 51 OF 21 SHEETS
DRAWING NO. 3074-4646-1

DESIGNED BY: IKJ
CHECKED BY: IKJ
DATE: 8-24-00

SCALE: 1" = 40'

PLANNERS & LAND SURVEYORS
nevada
PH: (702) 873-7500 FAX: (702) 363-2597
2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89102-5148