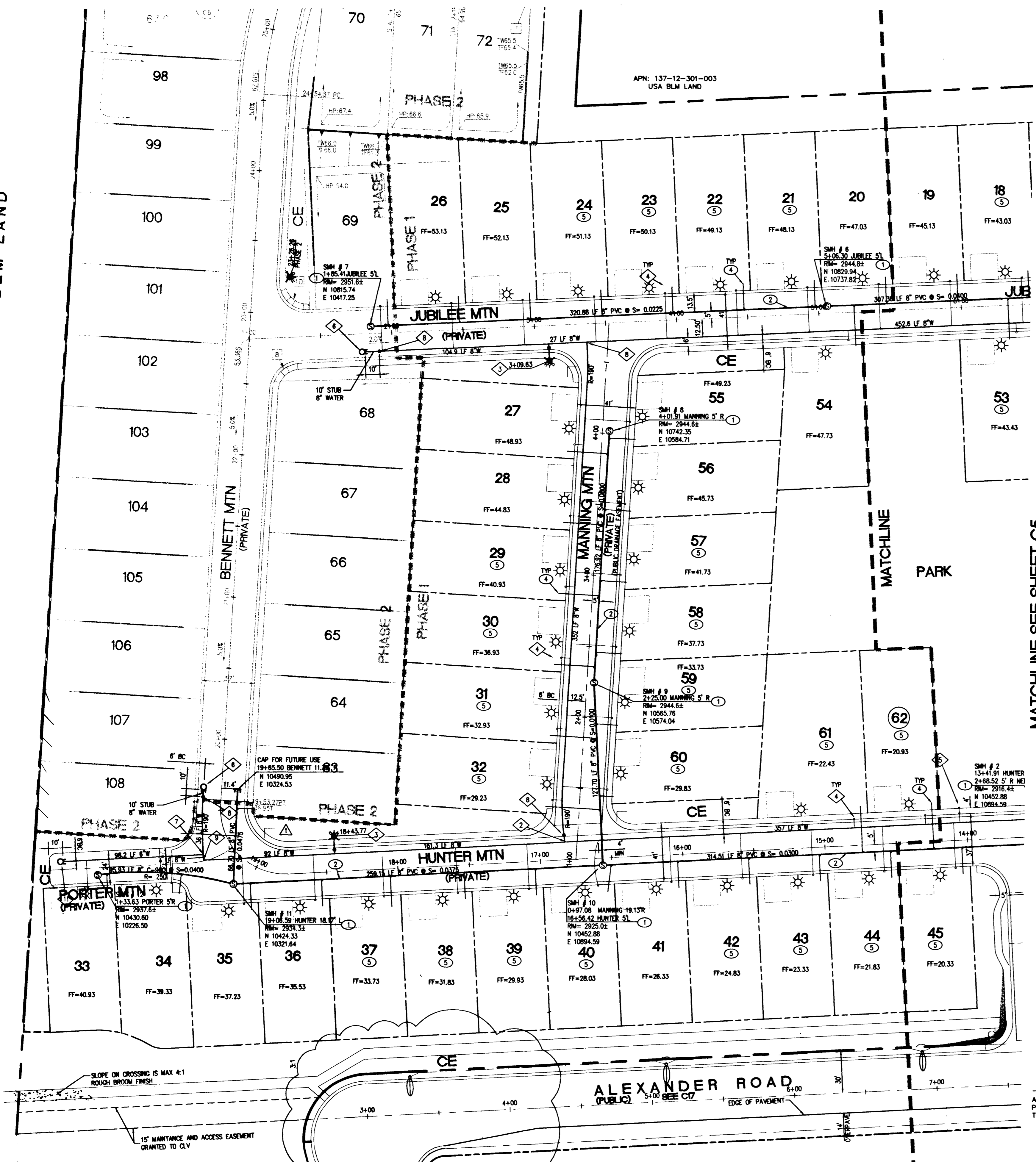
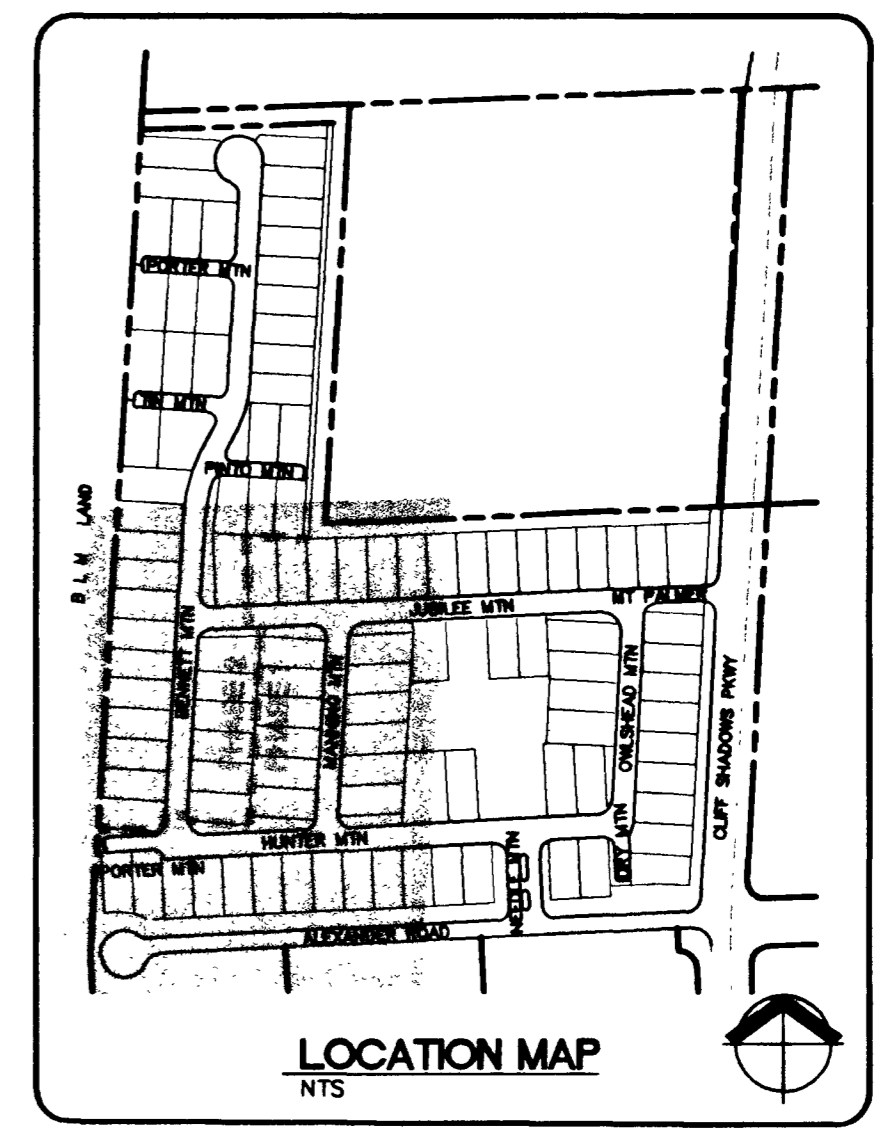


BLM LAND



### LVVWD NOTES (PROJECT # (25687))

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL 48 HOUR 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 PM THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION. (WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.)
- ALL WORK SHALL CONFORM TO THE LVVWD'S STANDARD PLATES, DRAWINGS AND SPECIFICATIONS AND 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 DRIVEWAY, 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),
    - SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
- 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 PM AND 6 AM, 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 FACILITIES CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
  - REDUCED PRESSURE PRINCIPLE ASSEMBLY - (1) 1 1/2" APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE #11A. 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.



MATCHLINE SEE SHEET C5

### QUANTITIES

QUANTITIES ARE AN ESTIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL NUMBERS.

8" PVC WATER	2,500 LF
6" PVC WATER	192 LF
12" PVC WATER	280 LF
FIRE HYDRANT ASSEMBLY	6 EA
1-1/2" IRRIGATION METER	2 EA
5/8" METER	65 EA
8" PVC SEWER	3,691 LF
48" SMH	17 EA
1-1/2" RPPA	2 EA
8" GATE VALVE	9 EA

### FIRE FLOW CALCULATION

FROM TABLE A-III-1-1997 UNIFORM FIRE CODE  
 TYPE I (2,800 SF) = 1500 GPM X 0X  
 SPRINKLER REDUCTION = 1500 GPM

THE FIRE FLOW REQUIREMENT IS: 1500 GALLONS PER MINUTE, 20 PSI RESIDUAL PRESSURE.

BASED ON:  
 SQUARE FOOTAGE: 2,800 SF  
 LARGEST AREA BETWEEN 4-HR AREA SEPARATION WALLS: SINGLE AREA  
 BUILDING HEIGHT: 27'-2"  
 NUMBER OF STORIES: 2 STORY  
 TYPE OF CONSTRUCTION: V-N  
 OCCUPANCY: SINGLE FAMILY  
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NO

REVIEWED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**Call before you Dig.**  
 1-800-227-2600  
 (NEVADA POWER SERVICE ALERT TOOL)

**Call before you OVERHEAD**  
 1-702-593-6111  
 (NEVADA POWER SERVICE ALERT TOOL)

**PRIVATE ST. / DRIVE NOTE:**  
 ALL ONSITE PRIVATE STREETS / PRIVATE DRIVES ARE P.U.E.S, PUBLIC SEWER EASEMENTS AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED HOA.

PROJECT NAME: KIMBALL HILL HOMES • LONE MOUNTAIN WEST 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.

APPROVED FOR CONSTRUCTION  
 LAS VEGAS VALLEY WATER DISTRICT DATE

### WATER CONSTRUCTION NOTES

- REMOVE EXISTING CAP AND THE PROPOSED 12" WATER TO EXISTING WATER LINE
- INSTALL 8"x8"x8" TEE WITH THRUST BLOCK PER UDACS PLATE #50
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE #7 (INCLUDING ALL VALVES, TEES, THRUST BLOCKS AND APPURTENANCES)
- INSTALL 1" LATERAL AND 5/8" DOMESTIC WATER METER PER UDACS PLATE #18
- INSTALL 1-1/2" IRRIGATION METER WITH 1-1/2" RPPA PER UDACS PLATE #1D AND 11A
- INSTALL 8" CAP AND 2" BLOW-OFF ASSEMBLY PER UDACS PLATE #4
- INSTALL 8"x8"x8" TEE WITH THRUST BLOCK PER UDACS PLATE #5
- INSTALL 8" GATE VALVE
- INSTALL 8" 90° BEND WITH THRUST BLOCK PER UDACS PLATE #5
- INSTALL 8" 45° BEND WITH THRUST BLOCK PER UDACS PLATE #5
- INSTALL 8" CAP AND 2" BLOWOFF ASSEMBLY PER UDACS PLATE NO. 4
- CONSTRUCT 8" WET TAP TO EXISTING 24" LINE W/ 24"x8" TAPPING TEE & 8" TAPPING VALVE.

### STORM DRAIN CONSTRUCTION NOTES

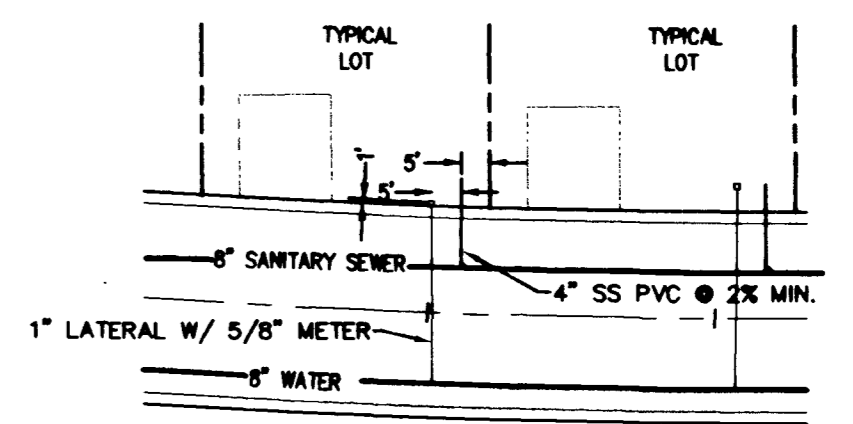
- CONSTRUCT MODIFIED TYPE "C" D.I. PER DETAIL SHEET 13
- CONSTRUCT TYPE 1 MANHOLE WITH LOOKING GRATED COVER
- CONSTRUCT 18" RCP
- CONSTRUCT 6" PVC

### SEWER CONSTRUCTION NOTES

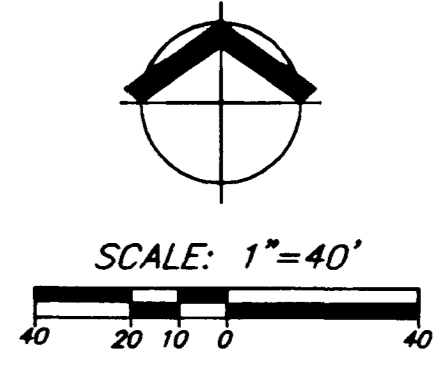
- INSTALL 48" SANITARY SEWER MANHOLE PER SOUTHERN NEVADA DESIGN AND CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS, 1997. SD-1.
- INSTALL 8" PVC SEWER MAIN
- TIE PROPOSED SANITARY SEWER TO EXISTING SEWER
- 4" SANITARY SEWER LATERAL SLOPE AT 2% MIN.
- INSTALL SEWER BACK WATER VALVE ON LOTS SHOWN.

### SEWER CONTRIBUTION

AVG. DAILY FLOW = (250 GPD/LOT) 250gpd x 62 lots = 0.0155 MGD  
 PEAK DAILY FLOW = (MGD)(3.5) = 0.015 = 0.0543 MGD



TYPICAL LATERAL DETAIL



**BENCHMARK**  
 APN: 137-12-101-008  
 USA BLM LAND  
 CLARK COUNTY VERTICAL CONTROL, CLARK COUNTY SURVEYOR T20S, R60E, SW QUARTER REFERENCE NUMBER 3 BENCHMARK NAME 1C004W6  
 A RIVET AND SQUARE ALUMINUM PLATE, STAMPED BM NO. 1C004W6, IN AN ELECTRICAL TRANSFORMER PAD, 175 FEET WEST OF AL GARRISON STREET, ON THE SOUTH SIDE OF CRAIG ROAD.  
 ELEVATION = 728.815 METERS (NAV0 '88)  
 ELEVATION = 2394.56 FEET (NAV0 '88)

APN: 137-12-101-001  
 TONY L. AND SHERYL L. DIXON  
**BASIS OF BEARING**  
 NORTH 87°08'54" EAST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 1, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA AND BEING THE CENTERLINE OF ALEXANDER ROAD, AS SHOWN BY MAP ON FILE IN BOOK 89 OF SURVEYS, PAGE 03 OF OFFICIAL RECORDS, CLARK COUNTY, NEVADA RECORDS.

**KIMBALL HILL HOMES • LONE MOUNTAIN WEST UNIT 1**  
**UTILITY PLAN - WEST HALF**  
 CITY OF LAS VEGAS  
 PORTION OF SECTION 1, TOWNSHIP 20 SOUTH, RANGE 59 EAST  
 M.D.M., CLARK COUNTY, NEVADA

DATE: 8/27/01  
 DESIGNED: B. JONES  
 ENGINEER: J. HITCHEN  
 CHECKED: \_\_\_\_\_  
 SCALE: 1" = 40' HORIZ  
 WRG PROJECT NO: KHH003

7/19/02  
 SHEET TITLE: UTILITY PLAN  
 SHEET NUMBER: MU-1  
 C4 OF 20  
 CLV DRAWING NO. 3074-4678-1  
 REPLIT

PLANNERS & ENGINEERS • LANDSCAPE ARCHITECTS & SURVEYORS  
 W R G  
 2860 Corporate Circle, Ste 430 Henderson, NV 89014  
 HENDERSON, NV 89002  
 TEL: 702.980.9300  
 FAX: 702.980.9305  
 (702) 987-0213