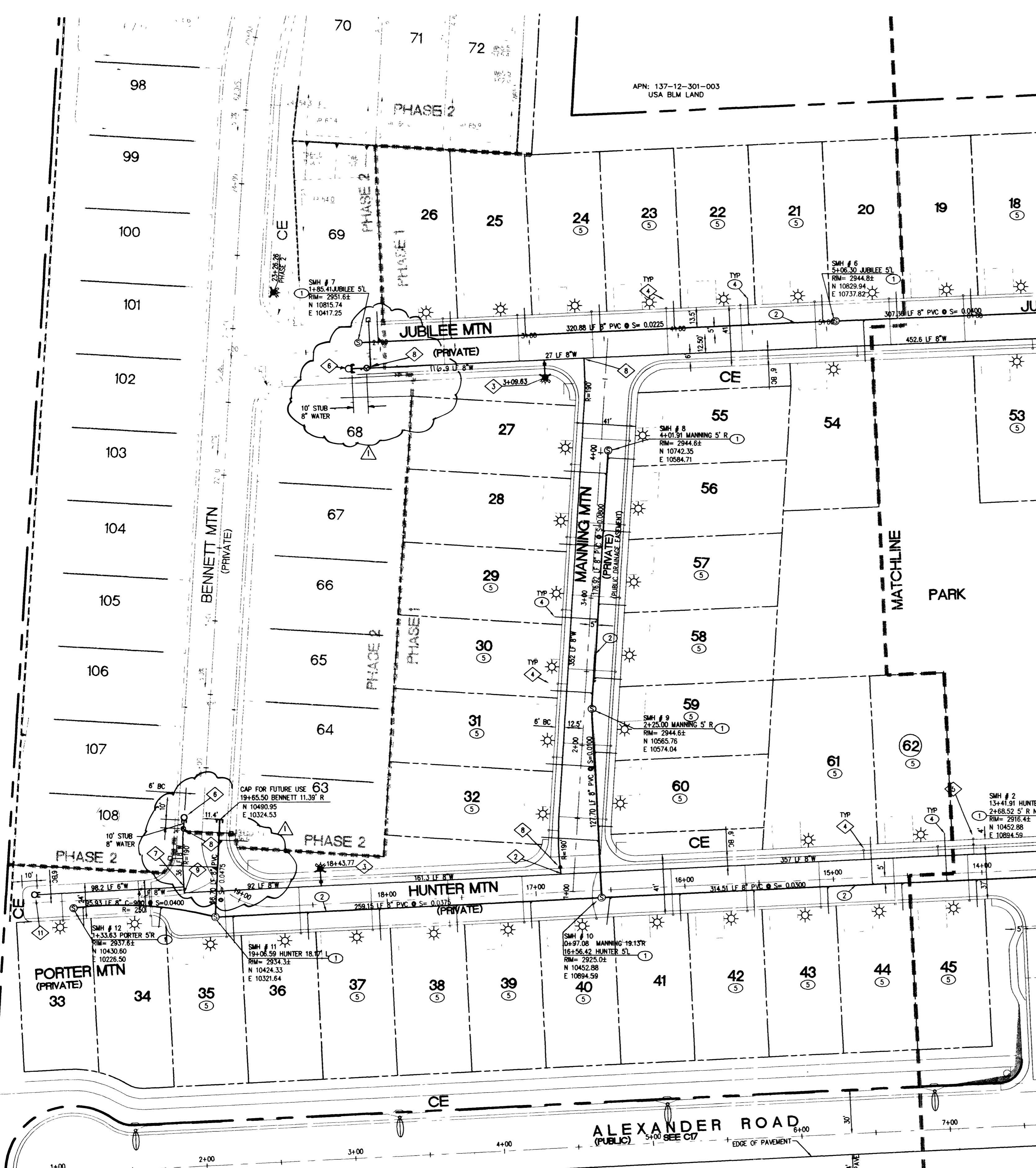


BLM LAND



MATCHLINE SEE SHEET C3

LVWD NOTES (PROJECT # (25687))

- 1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD...
2. ALL WORK SHALL CONFORM TO THE LVWD'S STANDARD PLATES, DRAWINGS AND SPECIFICATIONS...
3. 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...
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD...
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVWD APPROVED SERVICE SADDLES...
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS...
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY, VALLEY AND CURB GUTTERS...
8. 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...
A. POTABLE WATER SUPPLY QUALITY MATERIAL.
B. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM).
C. SLEEVING 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.

- 9. 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.
10. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVWD'S DISTRIBUTION SYSTEM.
11. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVWD 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 LVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE PRIOR LVWD APPROVAL.
13. ALL WATER FACILITIES CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

QUANTITIES

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

Table with 2 columns: Item Description and Quantity. Includes 8" PVC WATER (2,500 LF), 6" PVC WATER (192 LF), 12" PVC WATER (280 LF), FIRE HYDRANT ASSEMBLY (2 EA), 1-1/2" IRRIGATION METER (2 EA), 5/8" METER (6 EA), 8" PVC SEWER (3,691 LF), 48" SMH (1 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 V-N (2,800 SF) = 1500 GPM X 0% 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: [Signature] DATE: 3/28/01

Call before you Dig. 1-800-227-2600

Call before you OVERHEAD. 1-702-593-6111

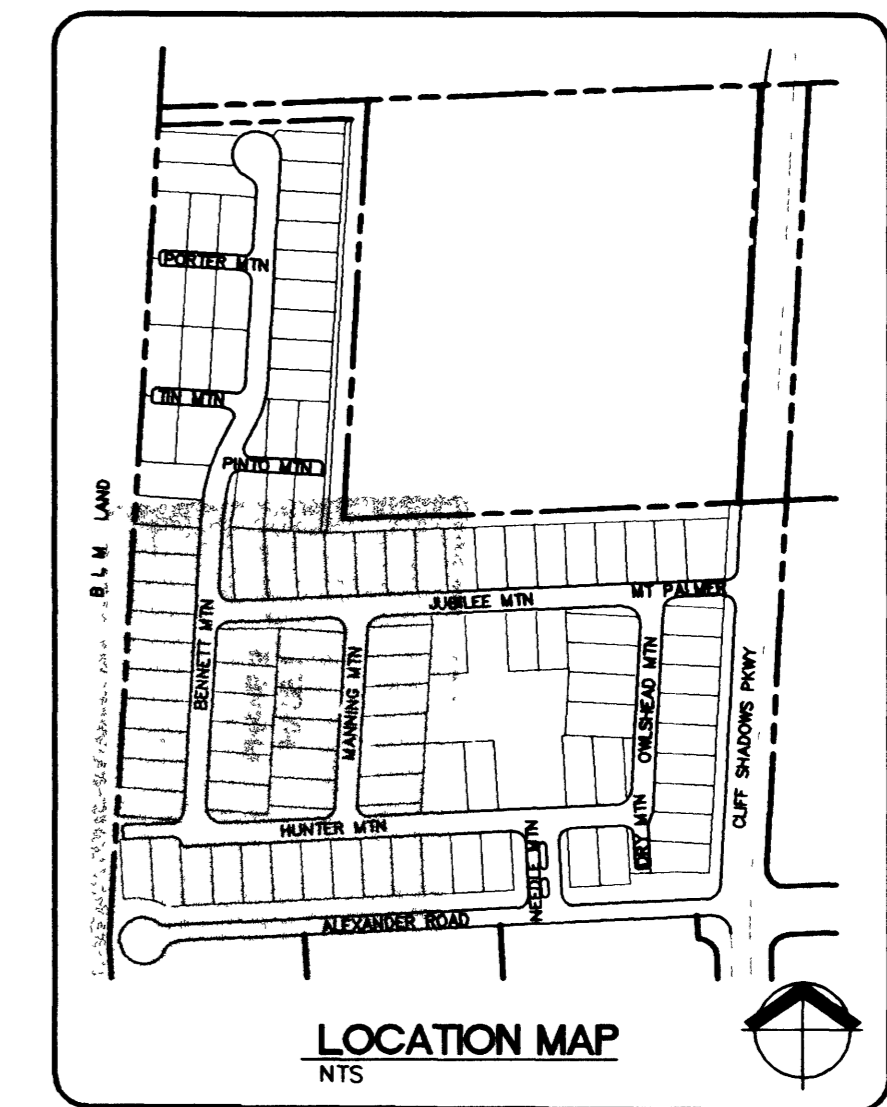
PRIVATE ST. / DRIVE NOTE:

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 COMPLES 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.
DATE: 3/28/01

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT DATE



WATER CONSTRUCTION NOTES

- 1. REMOVE EXISTING CAP AND TIE PROPOSED 12" WATER TO EXISTING WATER LINE.
2. INSTALL 8"X8"X8" TEE WITH THRUST BLOCK PER UDACS PLATE #50.
3. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE #7 (INCLUDING ALL VALVES, TEES, THRUST BLOCKS AND APPURTENANCES).
4. INSTALL 1" LATERAL AND 5/8" DOMESTIC WATER METER PER UDACS PLATE #1B.
5. INSTALL 1-1/2" IRRIGATION METER WITH 1-1/2" RPPA PER UDACS PLATE #10 AND 11A.
6. INSTALL 8" CAP AND 2" BLOW-OFF ASSEMBLY PER UDACS PLATE #4.
7. INSTALL 8"X8"X8" TEE WITH THRUST BLOCK PER UDACS PLATE #5.
8. INSTALL 8" GATE VALVE.
9. INSTALL 8" 90° BEND WITH THRUST BLOCK PER UDACS PLATE #5.
10. INSTALL 8" 45° BEND WITH THRUST BLOCK PER UDACS PLATE #5.
11. INSTALL 1" CAP AND 2" BLOWOFF ASSEMBLY PER UDACS PLATE NO. 4.
12. CONSTRUCT 8" WET TAP TO EXISTING 24" LINE W/ 24"X8" TAPPING TEE & 8" TAPPING VALVE.

STORM DRAIN CONSTRUCTION NOTES

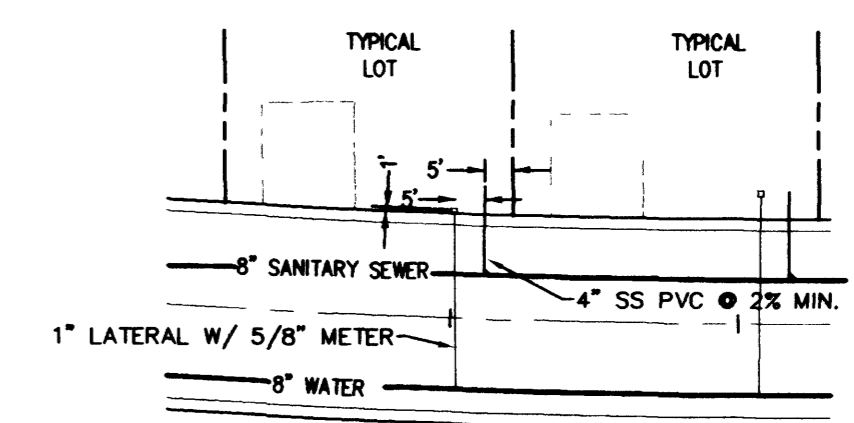
- 1. CONSTRUCT MODIFIED TYPE "C" D.I. PER DETAIL SHEET 13.
2. CONSTRUCT TYPE 1 MANHOLE WITH LOCKING GRATED COVER.
3. CONSTRUCT 18" RCP.
4. CONSTRUCT 6" PVC.

SEWER CONSTRUCTION NOTES

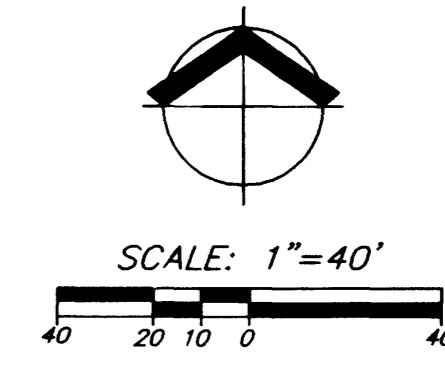
- 1. INSTALL 48" SANITARY SEWER MANHOLE PER SOUTHERN NEVADA DESIGN AND CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS, 1997. SD-1.
2. INSTALL 8" PVC SEWER MAIN.
3. TIE PROPOSED SANITARY SEWER TO EXISTING SEWER.
4. 4" SANITARY SEWER LATERAL SLOPE AT 2% MIN.
5. INSTALL SEWER BACK WATER VALVE 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
CLARK COUNTY VERTICAL CONTROL, CLARK COUNTY SURVEYOR
1205, 860E, SW QUARTER REFERENCE NUMBER 3 BENCHMARK NAME 10004W6
A RIVET AND SQUARE ALUMINUM PLATE, STAMPED BM NO. 10004W6, IN AN ELECTRICAL TRANSFORMER PAD, 175 FEET WEST OF AL GARRISON STREET, ON THE SOUTH SIDE OF CRAIG ROAD.
ELEVATION = 726.815 METERS (NAVD '88)
ELEVATION = 2384.56 FEET (NAVD '88)

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 80 OF SURVEYS, PAGE 03 OF OFFICIAL RECORDS, CLARK COUNTY, NEVADA RECORDS

Project information including: KIMBALL HILL HOMES, CITY OF LAS VEGAS, UTILITY PLAN - WEST HALF, SHEET MU-1 OF 20, DATE 3/28/01, and professional seals for J. STUART and J. HITCHEN.