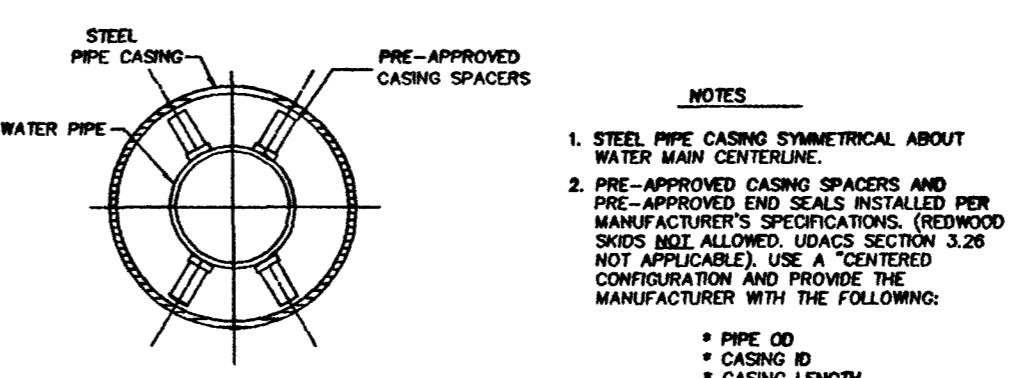
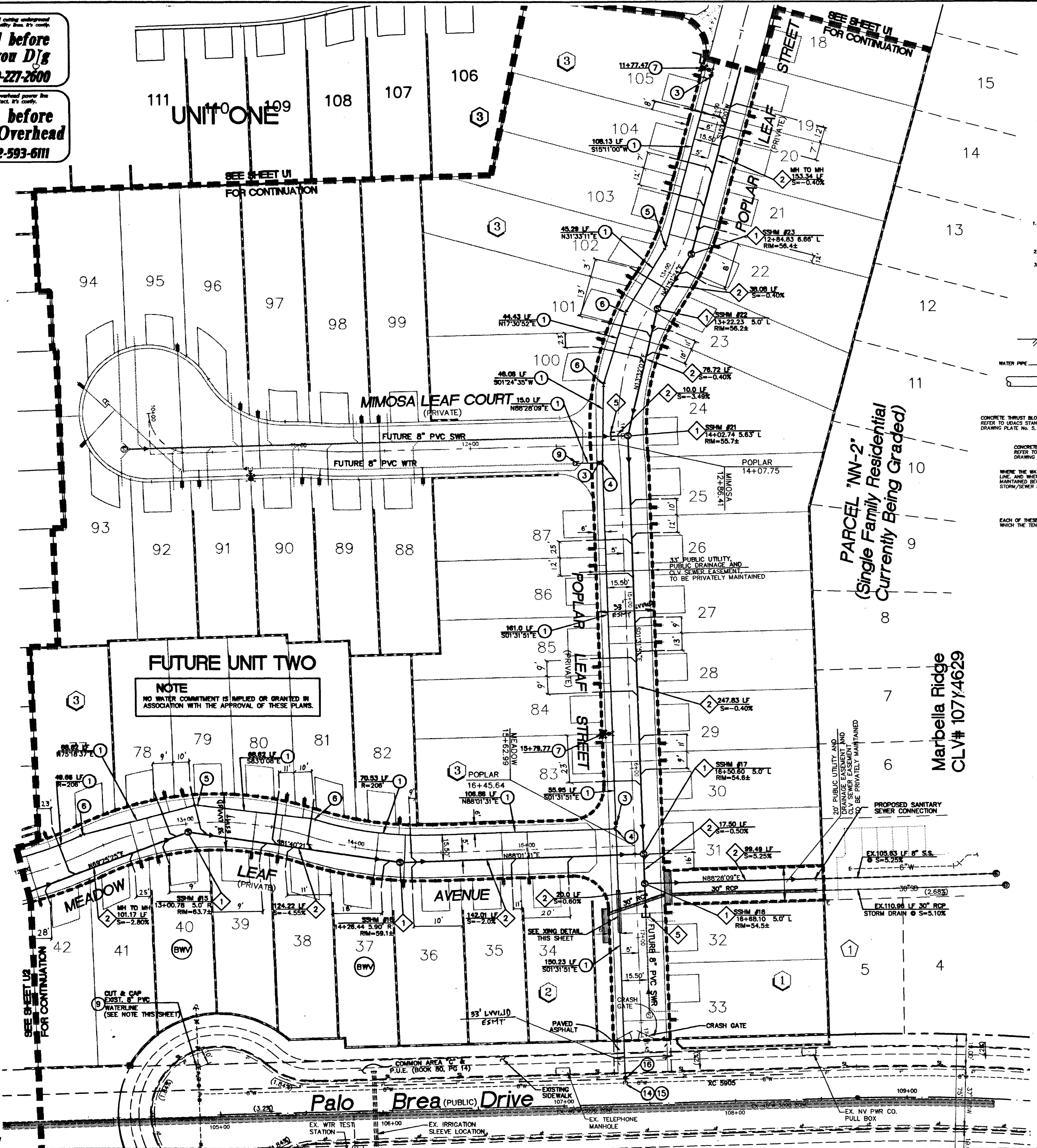


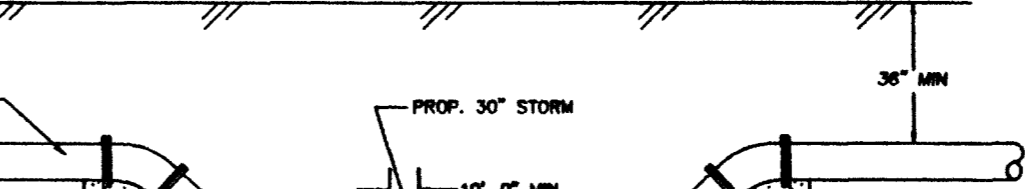
Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111



NOTES:
1. STEEL PIPE CASING SYMMETRICAL ABOUT WATER MAIN CENTERLINE.
2. PRE-APPROVED CASING SPACERS AND PRE-APPROVED END SEALS INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (WOOD SKIDS NOT ALLOWED. UOACS SECTION 3.26 NOT APPLICABLE.) USE A CENTERED CONFIGURATION AND PROVIDE THE MANUFACTURER WITH THE FOLLOWING:
* PIPE OD
* CASING ID
* CASING LENGTH

1. STEEL PIPE CASING SHALL BE FABRICATED FROM A MIN. OF 1/4" THICK STEEL PLATE, CONFORMING TO THE REQUIREMENTS OF ASTM A369, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED INTERIOR JOINTS SHALL BE GROOVED TO SMOOTH FINISH. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH ASME SECTION VIII DIV. 1 STANDARD FOR FABRICATED ELECTRICALLY WELDED STEEL WATER PIPE. COUPLINGS FOR STEEL CASINGS ARE NOT REQUIRED.



WHERE THE WATER LINE IS LESS THAN 18 INCHES OVER THE SEWER LINE WHERE THE WATER LINE IS UNDER THE SEWER LINE AND WHERE THE HORIZONTAL SEPARATION AS REQUIRED BY THE WATER SUPPLY REGULATIONS CANNOT BE MAINTAINED BECAUSE OF THE PHYSICAL OBSTRUCTIONS, THE WATER LINE SHALL BE PROTECTED BY CONSTRUCTION OF THE STORM/SEWER LINE AS FOLLOWS:
1. EXTRA HEAVY CAST IRON PIPE
2. WATER SUPPLY QUALITY MATERIALS OR
3. ENCASING WITH FOUR INCHES MINIMUM OF CONCRETE OR SLEEVING WITH WATER SUPPLY QUALITY PIPE.

EACH OF THESE PROVISIONS SHALL ALSO BE EXTENDED FOR OTHER THAN 90 DEGREE CROSSING TO THE POINT AT WHICH THE TEN FOOT SEPARATION BETWEEN THE WATER AND SEWER LINES IS ACHIEVED (10/ONE OF CROSSING ANGLE)

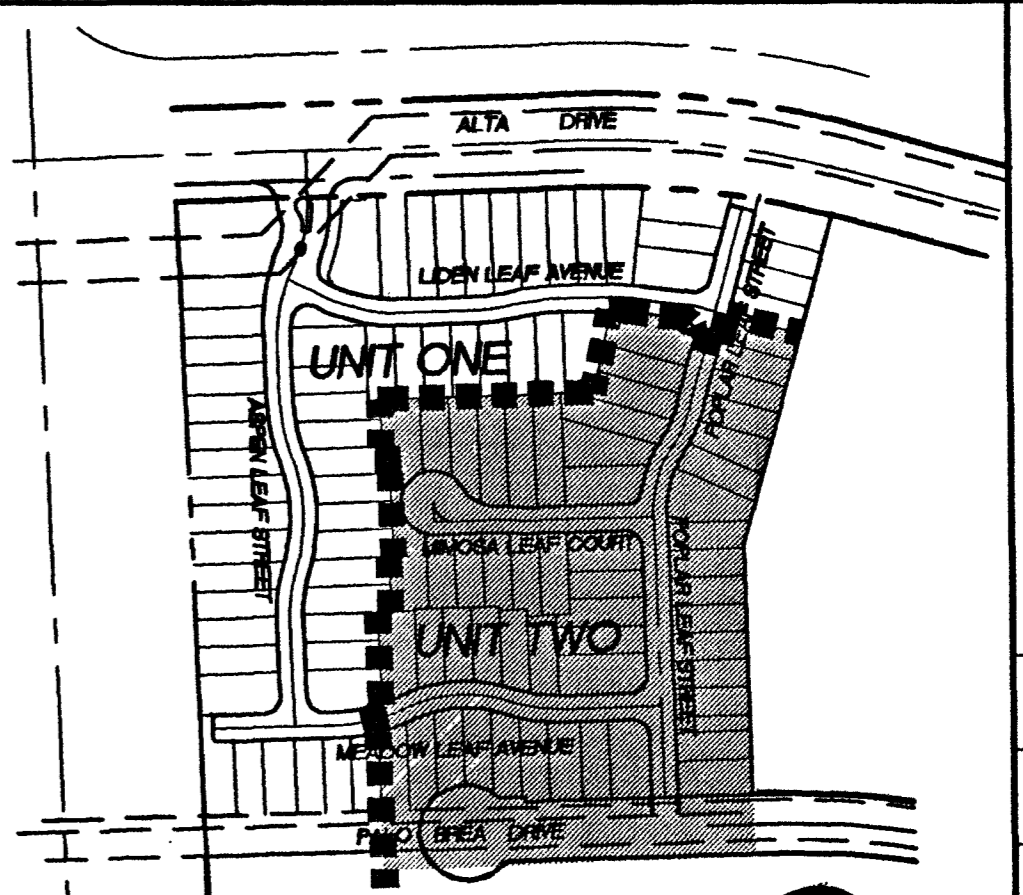
SEWER/WATER CROSSING DETAIL
Not To Scale

ABANDONED VALVE CUT AND CAP
ALL VALVES TO BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 12" OF THE VALVE BOX AND THEN FILLING THE REMAINING PORTION OF THE VALVE BOX WITH CONCRETE HAVING A COMPRESSIVE STRENGTH AT LEAST 2,000 PSI WITH AGENCY APPROVAL.
THE CONTRACTOR SHALL CUT THE EXIST. PIPE 3'+ BEYOND THE ABANDONED VALVE AND INSTALL A CAP. WHERE A JOINT OR COUPLING IN THE EXIST. PIPE IS UNCOVERED AT THE CUT AND CAP LOCATION, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. THE CONTRACTOR SHALL INSTALL CONCRETE THRUST BLOCK IN ACCORDANCE WITH THE PROVISIONS OF THE UOACS PLATE NO. 5 AT ALL CAP OR PLUG LOCATIONS.

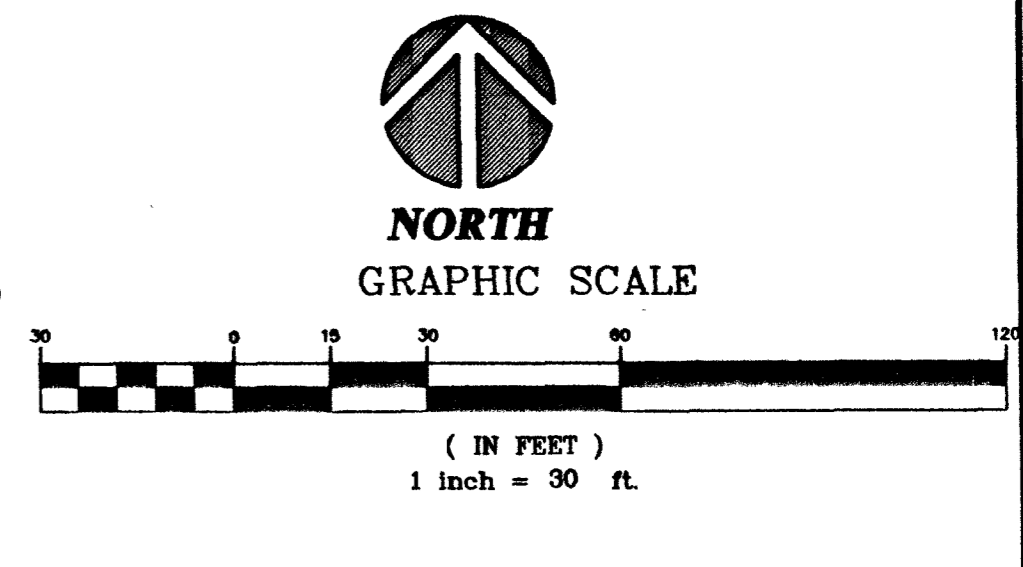
GENERAL NOTES

- CIVIL CONSULTANTS, INC. SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
- ALL UTILITY INSTALLATION SHALL CONFORM TO THE CITY OF LAS VEGAS STANDARDS, LAS VEGAS VALLEY WATER DISTRICT STANDARDS AND THE UNIFORM PLUMBING CODE.
- ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENT HAVE BEEN OBTAINED FROM THE OFFSITE OWNER.
- ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND OUTSIDE THE PROJECT BOUNDARY SHALL BE PERFORMED UNDER A SEPARATE ENCROACHMENT PERMIT ISSUED BY THE CONTROLLING AUTHORITY.
- ALL HYDRANTS SHALL BE PLACED A MIN. OF 18" BACK OF SIDEWALK.
- WATER AND SEWER LINES SHALL BE INSTALLED IN SEPARATE TRENCHES WITH AT LEAST TEN (10) FEET OF SEPARATION MEASURED HORIZONTALLY FROM THE EXTERIOR PIPE WALLS.
- ADD 3000' TO ALL ELEVATIONS SHOWN.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND VERIFY SIZE, MATERIAL, DEPTH, CONDITION, PRESSURE AND LOCATION OF ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA.
- PLANS MAY NOT INDICATE ALL EXISTING UTILITY LINES. CONTRACTOR IS TO EXERCISE EXTREME CAUTION DURING EXCAVATION IN ORDER TO AVOID DAMAGING ANY EXISTING UTILITY LINES. IF THE UTILITY LINES ARE DAMAGED BY THE CONTRACTOR, SUCH DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS TO SAWCUT AND REMOVE EXISTING ASPHALT AND CONCRETE AS NECESSARY FOR UTILITY TRENCHES, BACKFILL AND PATCH ALL TRENCHES ACCORDING TO SUMMERLIN STANDARDS.
- FIRE HYDRANT STATIONING REFERENCES TEE LOCATION.
- IN THE EVENT SEWER LATERAL LOCATIONS ARE PLACED ABOVE WATER LATERALS, OR REQUIRED CLEARANCES ARE NOT MAINTAINED, WATER QUALITY PIPE SHALL BE USED FOR SEWER INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INCLUDING ANY ADDITIONAL COSTS IN THEIR BIDDING.
- ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.
- ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.E. W.V. BOX, W.M.H., ANNOUE BOX, F.H., TEL. BOX, ETC.)
- THIS SITE IS LOCATED WITHIN THE LAS VEGAS VALLEY WATER DISTRICT (L.V.W.D.) 3205 WATER PRESSURE ZONE.

APPROVED FOR CONSTRUCTION ESN.018
LAS VEGAS VALLEY WATER DISTRICT DATE



LOCATION MAP
Not To Scale
SHADE AREA SHOWN ON THIS SHEET



BENCHMARK
Elevation = 3084.33 feet (SUMMERLIN datum)
G.C. WALLACE CONTROL MONUMENT No. 188
BEING A 3-1/4" ALUMINUM CAP, MARKED "C.P. 188, PLS 11174", AS SET PER FILE 85 OF SURVEYS, PAGE 17, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA, LYING JUST NORTH OF CHARLESTON BOULEVARD AND JUST EAST OF THE WESTERN SEGMENT OF THE LAS VEGAS BELTWAY.
NOTE: TO CONVERT SUMMERLIN DATUM TO NAVD 83 DATUM, ADD 2.2 FEET TO SUMMERLIN DATUM ELEVATIONS.

SIGNAGE KEY NOTES

- INSTALL 30"x30" R1-1 (STOP SIGN) UNLESS NOTED OTHERWISE
- INSTALL STREET NAME SIGN PER CLARK COUNTY AREA DWG. NO. 250.

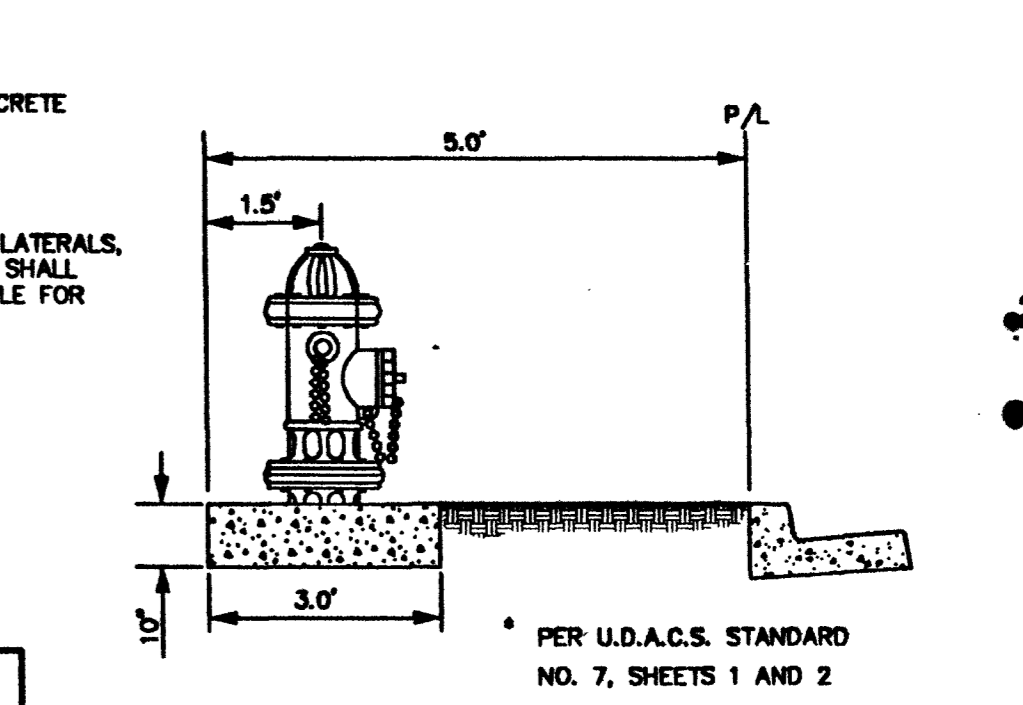
WATER QUANTITIES
(SEE SHEET U2)

SEWER CONTRIBUTIONS
AVERAGE FLOW.....0.0015 MGD
PEAK FLOW.....0.0051 MGD

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW IS 1500 GPM AT 20 PSI RESIDUAL PRESSURE.
BASED ON:
SQUARE FOOTAGE.....2,350 S.F.
BUILDING HEIGHT.....19'
NUMBER OF STORIES.....1
OCCUPANCY.....SINGLE FAMILY
FULL AUTOMATIC FIRE SPRINKLERS.....NO

REVIEWED BY: DATE



FIRE HYDRANT DETAIL
NOT TO SCALE
PER U.D.A.C.S. STANDARD NO. 7, SHEETS 1 AND 2

Kimball Hill Homes
3598 Palo, Mountain Avenue Henderson, Nevada 89052
(702) 897-0213 FAX (702) 897-0169

CONSULTANTS, INC.
ENGINEERING PLANNING AND SURVEYING

6280 S. Valley View Blvd. Suite 200 Las Vegas, NV 89118
Tel: (702) 368-3008 Fax: (702) 368-0047

REVISION
ADD B/W VALUES
DATE BY
1
REV

UTILITY PLAN (SOUTH SECTION)
ASPEN MEADOWS UNIT ONE

SHEET 03/01/00
DESIGNED BY: SSS
CHECKED BY: JMW
PROJECT NO.: 99-9063-03
SCALE: 1"=30'

SHEET U3
6 OF 15 SHEETS
DRAWING NO. 3074-4635-1

AS-BUILTS