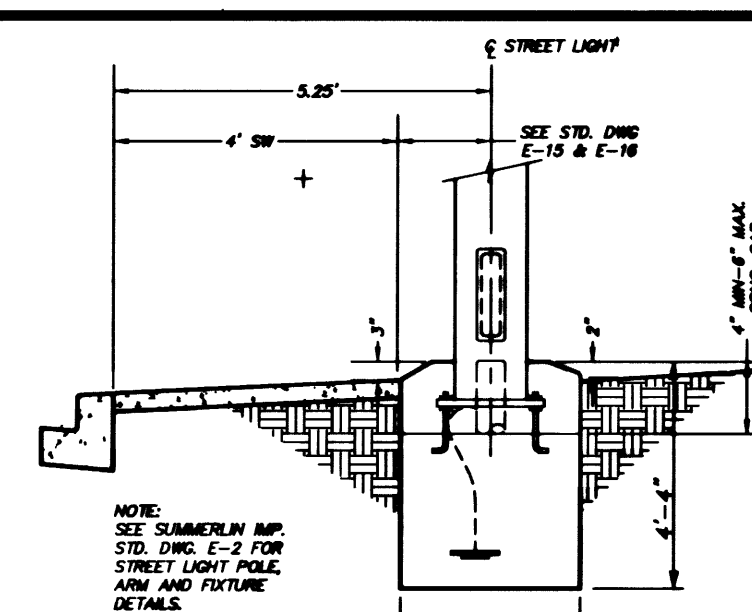
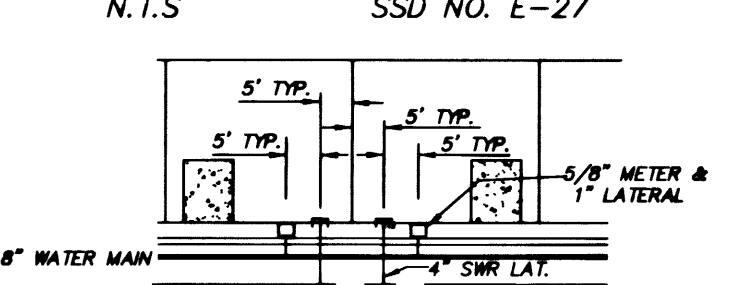
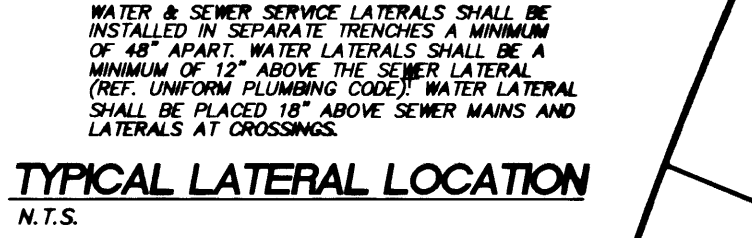




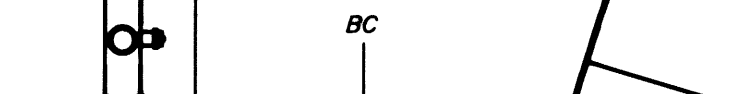
STREET LIGHT LOCATION
N.T.S. SSD NO. E-27



TYPICAL LATERAL LOCATION
N.T.S.



FIRE HYDRANT LOCATION
N.T.S. STD. DWG. NO. 516



SEWER CONNECTION NOTE



SEWER CONTRIBUTION



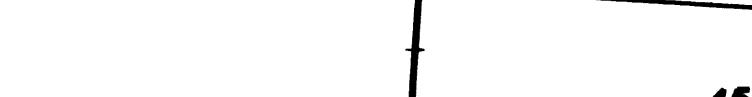
SEWER CONTRIBUTION



SEWER CONTRIBUTION



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SEWER CONTRIBUTION



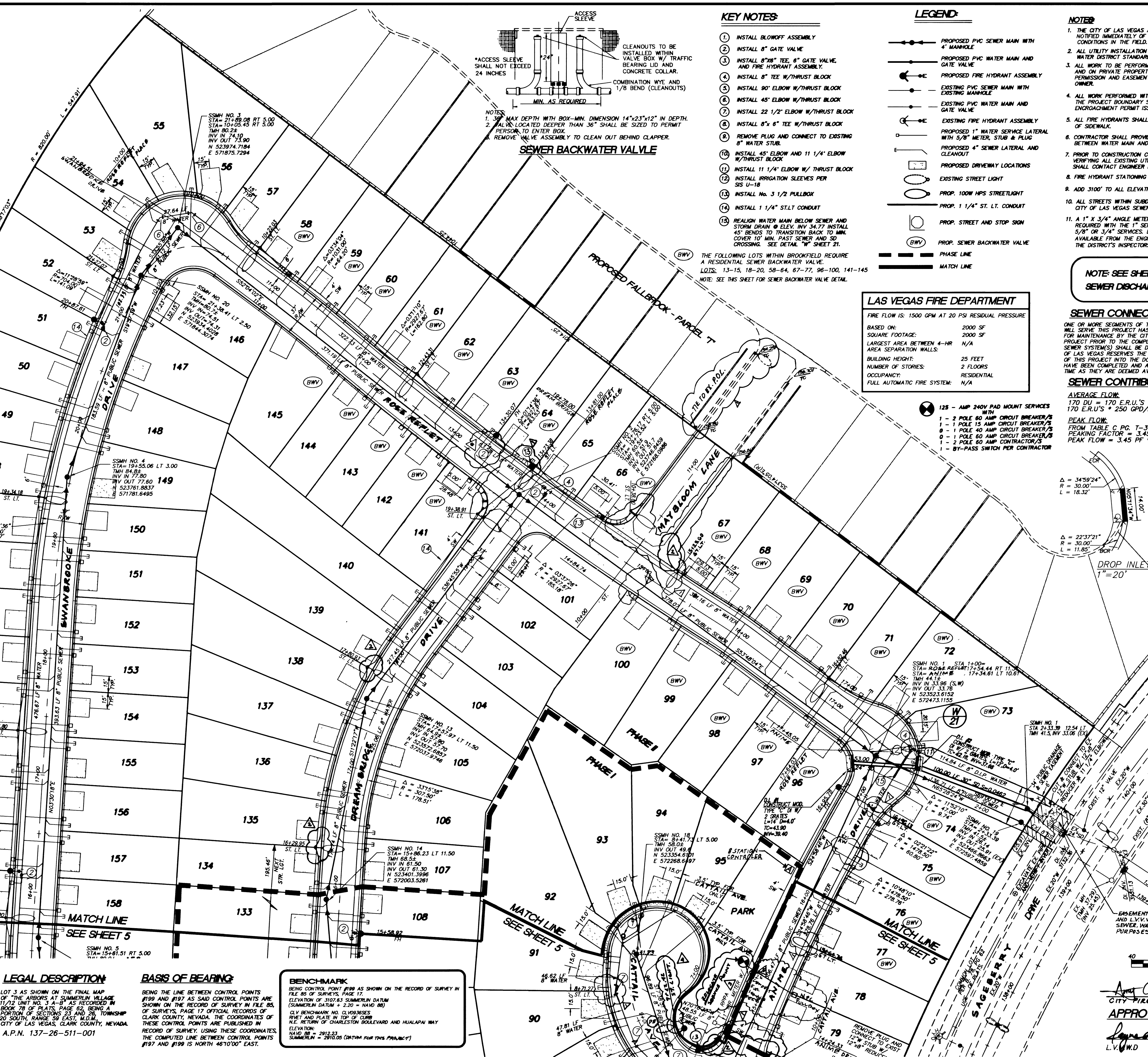
SEWER CONTRIBUTION



SEWER CONTRIBUTION



SEWER CONTRIBUTION



LEGAL DESCRIPTION
LOT 3 AS SHOWN ON THE FINAL MAP OF THE ARROYO AT SUMMERLIN VILLAGE, 1/12 UNIT NO. 3 A-B AS RECORDED IN BOOK 78 OF PLATS, BEING A PORTION OF SECTIONS 23 AND 26, TOWNSHIP 20 SOUTH, RANGE 29 NORTH, MERIDIAN 11 WEST, CITY OF LAS VEGAS, CLARK COUNTY, NEVADA. A.P.N. 137-26-511-001

BASIS OF BEARING
BEING THE LINE BETWEEN CONTROL POINTS #199 AND #197 AS SAID CONTROL POINTS ARE SHOWN ON THE RECORD OF SURVEY IN FILE 85 OF SURVEYS, PAGE 17 OF OFFICIAL RECORDS OF CLARK COUNTY, NEVADA. THE COORDINATES OF THESE CONTROL POINTS ARE PUBLISHED IN RECORD OF SURVEY, USING THESE COORDINATES, THE COMPUTED LINE BETWEEN CONTROL POINTS #197 AND #199 IS NORTH 48°10'00" EAST.

BENCHMARK
BEING CONTROL POINT #199 AS SHOWN ON THE RECORD OF SURVEY IN FILE 85 OF SURVEYS, PAGE 17, ELEVATION OF 3107.63 SUMMERLIN DATUM (SUMMERLIN DATUM + 2.20 = NAVD 88) CLV BENCHMARK NO. CLV036365 (INSET AND PLATE IN TOP OF CURB N.E. RETURN OF CHARLSTON BOULEVARD AND HUALAPAI WAY ELEVATION: NAVD 88 = 2912.23 SUMMERLIN = 2910.05 (DATUM FOR THIS PROJECT)

SEWER BACKWATER VALVE
NOTES:
1. 36" MAX DEPTH WITH BOX-MIN. DIMENSION 14"x23"x12" IN DEPTH.
2. VALVE LOCATED DEEPER THAN 36" SHALL BE SIZED TO PERMIT PERSON TO ENTER BOX.
3. REMOVE VALVE ASSEMBLY TO CLEAN OUT BEHIND CLAPPER.

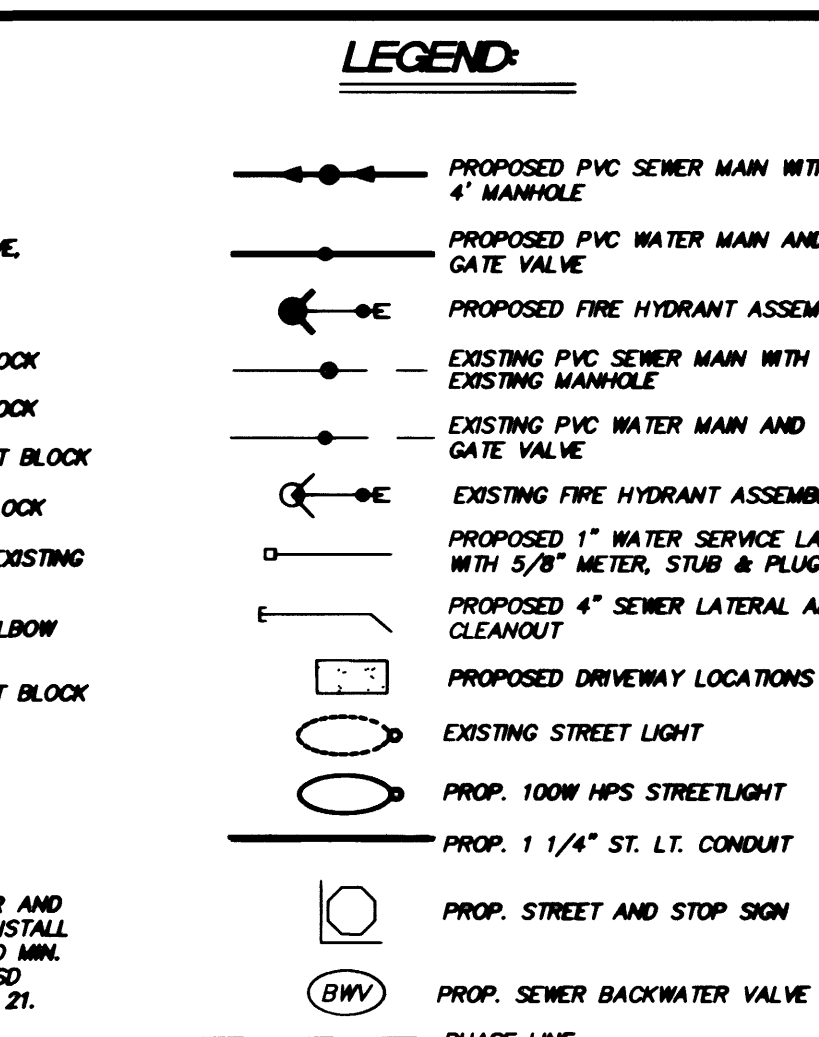
SEWER CONNECTION NOTE
ONE OR MORE SEGMENTS OF THE DOWNSIDE SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSIDE SEWER SYSTEM(S) SHALL BE DONE AT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

SEWER CONTRIBUTION
AVERAGE FLOW:
170 DU = 170 E.R.U.'S
170 E.R.U.'S * 250 GPD/E.R.U. = 42,500 GPD = 0.0425 MGD
PEAK FLOW:
FROM TABLE C, PG. T-3 CLARK COUNTY SANITATION DISTRICT, PEAKING FACTOR = 3.45
PEAK FLOW = 3.45 PF * 0.0425 MGD = 0.146 MGD

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FROM TABLE C, PG. T-3 CLARK COUNTY SANITATION DISTRICT, PEAKING FACTOR = 3.45
PEAK FLOW = 3.45 PF * 0.0425 MGD = 0.146 MGD

- KEY NOTES**
1. INSTALL BLOWOFF ASSEMBLY
 2. INSTALL 8" GATE VALVE
 3. INSTALL 8"x6" TEE, 6" GATE VALVE, AND FIRE HYDRANT ASSEMBLY.
 4. INSTALL 8" TEE W/THRUST BLOCK
 5. INSTALL 90° ELBOW W/THRUST BLOCK
 6. INSTALL 45° ELBOW W/THRUST BLOCK
 7. INSTALL 22 1/2" ELBOW W/THRUST BLOCK
 8. INSTALL 8"x 6" TEE W/THRUST BLOCK
 9. REMOVE PLUG AND CONNECT TO EXISTING 8" WATER STUB.
 10. INSTALL 45° ELBOW AND 11 1/4" ELBOW W/THRUST BLOCK
 11. INSTALL 11 1/4" ELBOW W/ THRUST BLOCK
 12. INSTALL IRRIGATION SLEEVES PER S5 U-18
 13. INSTALL 1 1/2" PULLBOX
 14. INSTALL 1 1/4" ST.LT. CONDUIT
 15. REALIGN WATER MAIN BELOW SEWER AND STORM DRAIN @ ELEV. INV. 34.77 INSTALL 45° BENDS TO TRANSITION BACK TO MIN. COVER 10' MIN. PAST SEWER AND 50' CROSSING. SEE DETAIL "W" SHEET 21.



- NOTES**
1. THE CITY OF LAS VEGAS AND HUNSAKER & ASSOCIATES SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
 2. ALL UTILITY INSTALLATION SHALL CONFORM TO LAS VEGAS VALLEY WATER DISTRICT STANDARDS AND THE UNIFORM PLUMBING CODE.
 3. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED WITHOUT WRITTEN PERMISSION AND EASEMENT HAVE BEEN OBTAINED FROM THE OFFSITE OWNER.
 4. 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 CITY OF LAS VEGAS.
 5. ALL FIRE HYDRANTS SHALL BE PLACED A MIN. 18" BEHIND BACK OF SIDEWALK.
 6. CONTRACTOR SHALL PROVIDE A MINIMUM OF 11 FEET SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER MAIN.
 7. PRIOR TO CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS AND SHALL CONTACT ENGINEER IF ANY DISCREPANCIES ARE FOUND.
 8. FIRE HYDRANT STATIONING REFERENCES TEE LOCATION.
 9. ADD 3100' TO ALL ELEVATIONS SHOWN.
 10. ALL STREETS WITHIN SUBDIVISION ARE PUBLIC STREETS, P.U.E. AND CITY OF LAS VEGAS SEWER EASEMENTS.
 11. A 1" X 3/4" ANGLE METER STOP AND 3/4" METER BOX WILL BE REQUIRED WITH THE 1" SERVICE LATERALS FOR ALL SERVICES WITH 5/8" OR 3/4" SERVICES. DETAILS OF THE ABOVE INSTALLATION ARE AVAILABLE FROM THE ENGINEERING SERVICES DIVISION AND FROM THE DISTRICT'S INSPECTORS.

NOTE: SEE SHEET 15 FOR SEWER DISCHARGE MAP

LAS VEGAS FIRE DEPARTMENT

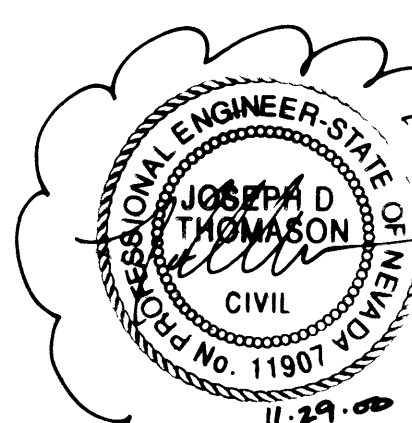
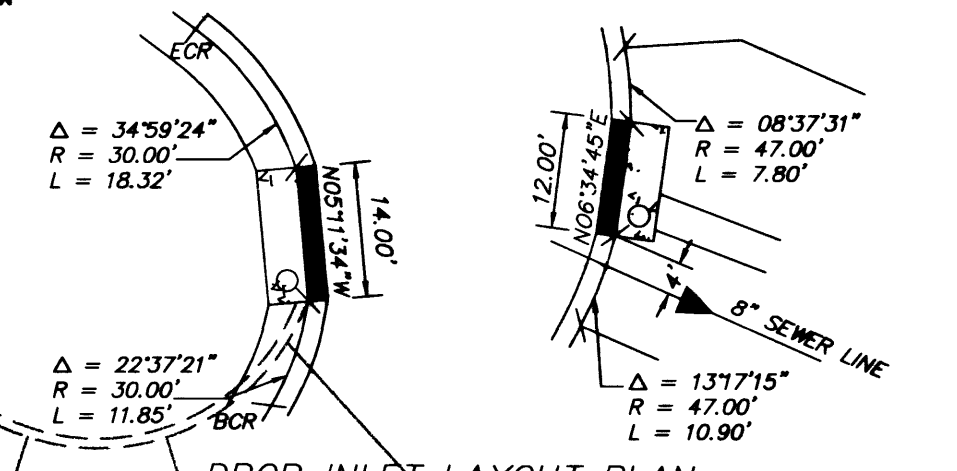
FIRE FLOW IS: 1500 GPM AT 20 PSI RESIDUAL PRESSURE

BASED ON:

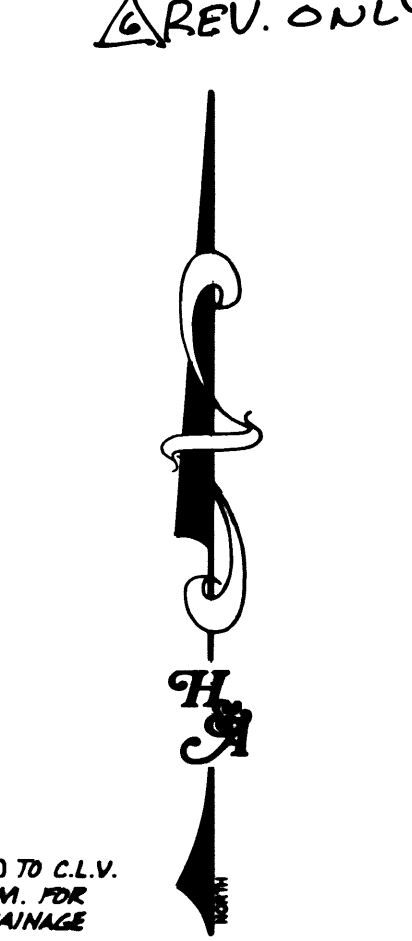
2000 SF
SQUARE FOOTAGE:
2000 SF
LARGEST AREA BETWEEN 4-HR
AREA SEPARATION WALLS:
N/A
BUILDING HEIGHT:
25 FEET
NUMBER OF STORIES:
2 FLOORS
OCCUPANCY:
RESIDENTIAL
FULL AUTOMATIC FIRE SYSTEM:
N/A

SEWER CONNECTION NOTE
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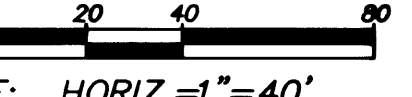
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170 E.R.U.'S * 250 GPD/E.R.U. = 42,500 GPD = 0.0425 MGD
PEAK FLOW:
FROM TABLE C, PG. T-3 CLARK COUNTY SANITATION DISTRICT, PEAKING FACTOR = 3.45
PEAK FLOW = 3.45 PF * 0.0425 MGD = 0.146 MGD



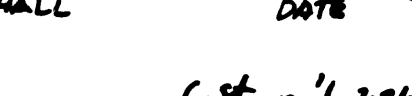
REV. ONLY



SEWER CONNECTION NOTE



SEWER CONTRIBUTION



SEWER CONTRIBUTION

Call before you Overhead
1-702-593-6111
NEVADA POWER ENVIRONMENT SAFETY SERVICES DEPARTMENT

Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

KAUFMAN BROAD
4755 INDUSTRIAL ROAD
LAS VEGAS, NV 89103
(702) 201-1000

HUNSAKER & ASSOCIATES
PLANNING
ENGINEERING
SURVEYING
LAS VEGAS, NV
401 N. Buffalo Dr. Suite 100, Las Vegas, Nevada 89108 (702) 248-4200

UTILITY PLAN
CITY OF LAS VEGAS
NEVADA
BROOKFIELD PARCEL "U"
PHASE I AND II - SUMMERLIN

APPROVALS
5/22/98
DATE
5:22 PM
DATE

UT2
6 of 22
DRAWING NO. 307Y-4545-1+2