

**NORTH WEST  
RANCHO-ALTA  
INTERSECTION**  
DETAIL 'A'  
SCALE 1"=20'

- CITY OF LAS VEGAS SANITATION NOTES:**
- SERVICES SHALL COMPLY WITH WESTERN PLUMBING CODE AS TO SEPARATION DISTANCE.
  - ALL UNITS TO BE SERVED INDIVIDUALLY AS PER SECTION 313 OF THE UNIFORM PLUMBING CODE.
  - CONTRACTOR SHALL FURNISH THE ENGINEER WITH AS-BUILT DRAWINGS SHOWING THE EXACT LOCATION OF ALL CONNECTIONS.
  - CONCRETE COLLARS TO BE CONSTRUCTED AROUND ALL MANHOLES AND WATER VALVES.
  - CHISEL "S" OR "G" WHEREVER SEWER OR GAS LINES PASS UNDER THE CURB.
  - CALL BEFORE YOU DIG 1-800-227-2600.

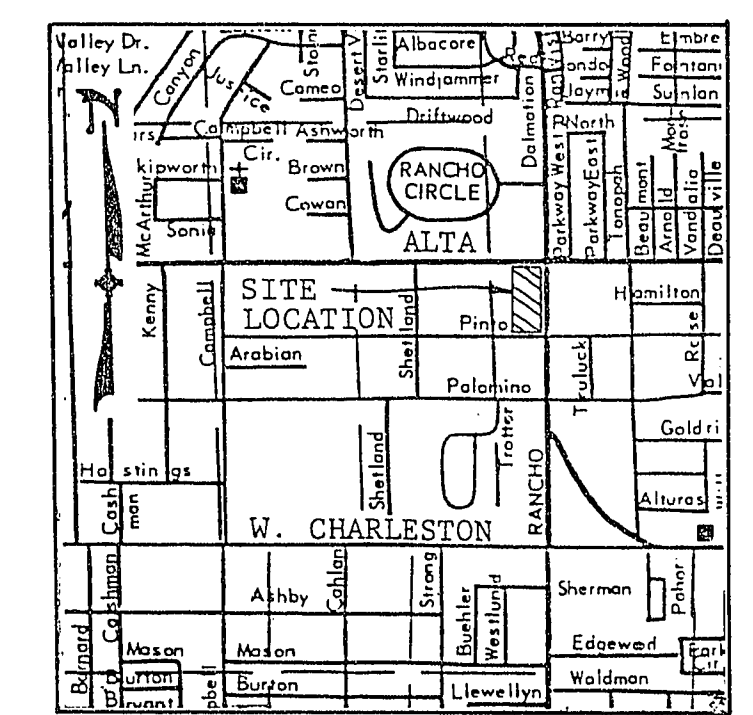
**ESTIMATE OF QUANTITIES:**

| DESCRIPTION  | AMOUNT | UNIT |
|--|--------|------|
| <b>STORM DRAIN</b>   |        |      |
| 6" PVC SDR 35 DRAIN SIDEWALK DRAIN   | 149    | LF   |
| 1" DRAIN & NEW 1/2" OF BUBBLER CONNECT EXIST. OUTLET DRAIN TO NEW 40" M.H. | 3      | EA   |
| <b>SANITARY SEWER</b>  |        |      |
| 6" PVC SDR 35 ONSITE   | 132    | LF   |
| OFFSITE  | 68     | LF   |
| 6" CLEAN OUT ONSITE  | 2      | EA   |
| <b>WATER</b>   |        |      |
| ONSITE   |        |      |
| 6" 90° BEND  | 4      | EA   |
| 6" X 6" TEE  | 3      | EA   |
| 6" X 8" REDUCER  | 1      | EA   |
| 6" FNCT  | 1      | EA   |
| <b>FIRE HYDRANT</b>  |        |      |
| 6" GATE VALVE  | 2      | EA   |
| 1" SERVICE LINE  | 5      | EA   |
| 2" SCH. 40 PVC   | 80     | LF   |
| 6" CL. 150 ACP   | 1534   | LF   |
| 6" CL. 150 ACP   | 7      | LF   |
| <b>DEESITE</b>   |        |      |
| 6" 45° BEND  | 2      | EA   |
| 6" X 8" TEE  | 1      | EA   |
| JOINT & PLUG   | 1      | EA   |
| 6" GATE VALVE  | 2      | EA   |
| 6" CL. 150 ACP   | 274    | LF   |

- LAS VEGAS VALLEY WATER DISTRICT GENERAL NOTES:**
- ALL WORK TO CONFORM TO THE LAS VEGAS VALLEY WATER DISTRICT LATEST STANDARD PLATES AND SPECIFICATIONS.
  - ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE NO. 1, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA.
  - NOTICE TO BE GIVEN ENGINEERING DEPARTMENT OF THE LAS VEGAS VALLEY WATER DISTRICT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
  - SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4-INCH AND 1-INCH SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1 1/2-INCH AND 2-INCH SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
  - ALL LINES TO BE PRESSURE TESTED TO 200 PSI.
  - DEFLECTION ANGLES SHALL NOT EXCEED 2 1/2 DEGREES PER 13 FOOT SECTION OF PIPE FOR PIPE SIZES SMALLER THAN 14-INCHES, AND SHALL NOT EXCEED 2 DEGREES FOR PIPE SIZES BETWEEN 14-INCHES AND 16-INCHES.
  - ALL METERS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS.
  - DETECTOR TAPE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED ON THE PLANS AND AS FOLLOWS:  
A. OVER ALL MAINS NOT INSTALLED AT 6 FEET FROM BACK OF CURB.  
B. OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAINS.
- CALL BEFORE YOU DIG - 1-800-227-2600

**BENCHMARK**  
BENCHMARK NO. 0613203 BRASS CAP ON TOP OF CURB @ SOUTHWEST RETURN ON PINTO LANE AND RANCHO DRIVE.  
ELEVATION = 2073.70

- NOTES:**
- AN ONSITE WATER PERMIT MUST BE OBTAINED FROM THE LAS VEGAS FIRE DEPARTMENT PRIOR TO CONSTRUCTION.
  - ALL MATERIALS USED FOR THE ONSITE WATER SYSTEM MUST BE UL OR FM LISTED/APPROVED.



**VICINITY MAP**

- LEGEND:**
- PROPOSED A.C. PAVEMENT
  - PROPOSED CONCRETE
  - WATER LINE (DASHED IF EXISTING)
  - FIRE HYDRANT ASSEMBLY
  - GATE VALVE (DASHED IF EXISTING)
  - SANITARY SEWER LINE (DASHED IF EXISTING)
  - SANITARY SEWER CLEAN OUT
  - EXISTING MANHOLE

LARGEST BUILDING AREA = 17,160 SQ. FEET  
BLDG. CONSTRUCTION TYPE II  
BLDG. SPRINKLER SYSTEM (X) YES ( ) NO  
REQUIRED FIRE FLOW 2056 GPM  
EXIST. STATIC WATER PRESSURE IS 104 PSI

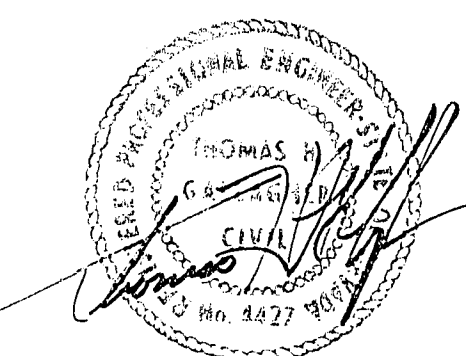
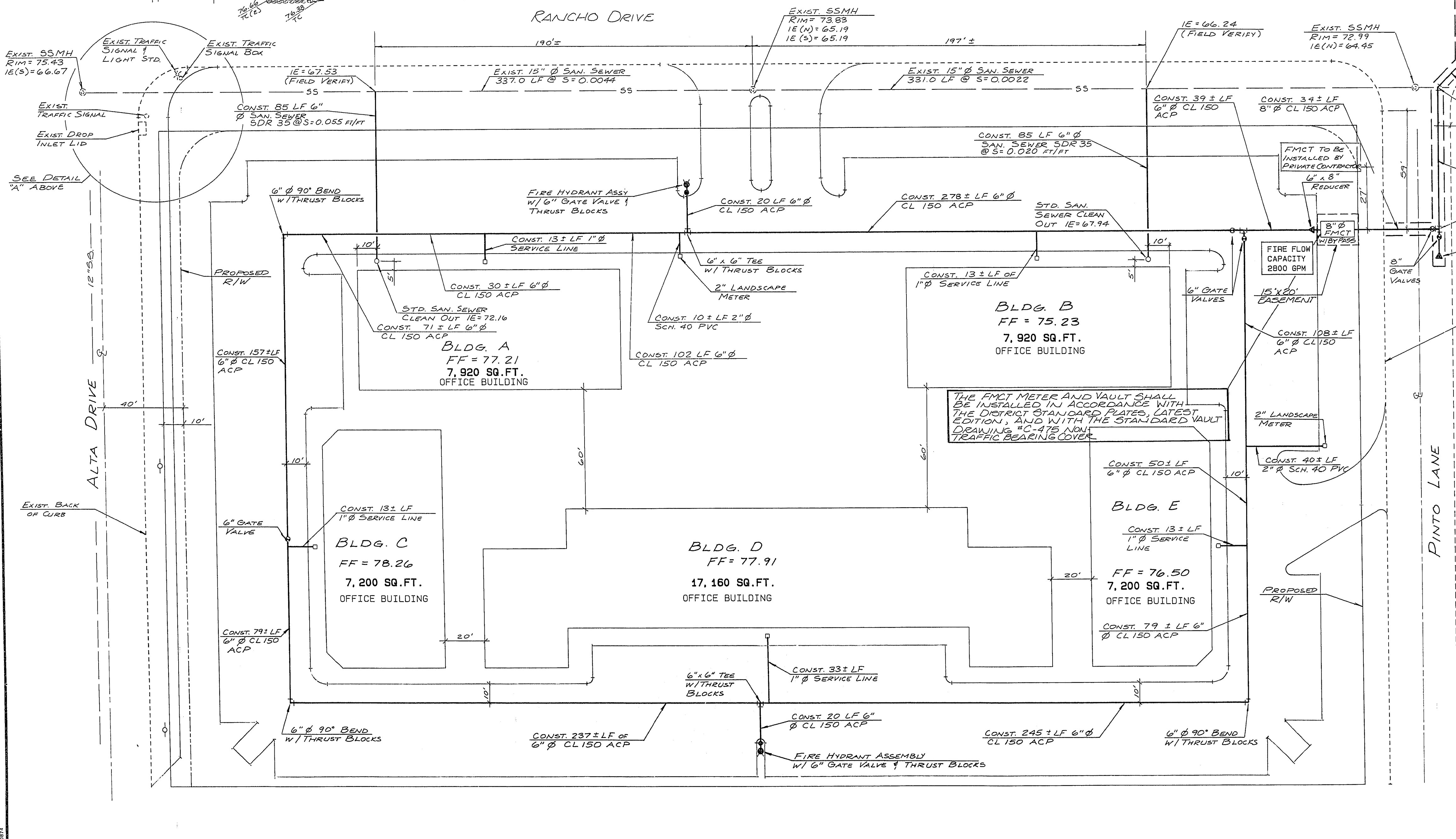
- CITY OF LAS VEGAS FIRE DEPARTMENT NOTES:**
- FIRE HYDRANTS IN PRIOR TO CONSTRUCTION WITHIN THREE HUNDRED (300) FEET OF ALL CONSTRUCTION PER LAS VEGAS FIRE DEPARTMENT.
  - AUTHORIZED FIRE HYDRANTS FOR THIS PROJECT ARE: KENNEDY GUARDIAN OR MUELLER A-423 CENTURION.
  - CALL THE LAS VEGAS FIRE DEPARTMENT AT 389-2888 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.

*David A. Donnelly* 3/7/88  
L.V.V.W.D. DATE

*David Bowman* 2-22-88  
C.L.V. FIRE MARSHALL DATE

SEE SHEET C-2  
C.L.V. LAND DEV. & FLOOD CONTROL DATE

SEE SHEET C-2  
C.L.V. SANITATION ENGINEER DATE



1/29/88



SHEET C-4 OF 8

**SUMMIT**  
ENGINEERING CORPORATION  
CONSULTING ENGINEERS AND SURVEYORS

SCALE: 1"=50'  
HORIZ. 1"=50'  
VERT. 1"=10'

JOB NO. 7117  
DRAWING NO. 11/29/88

**QUAIL PARK V**  
UTILITY PLAN

NEVADA  
CLARK COUNTY  
LAS VEGAS

| REV | DATE    | DESCRIPTION                                | BY  | APP'D |
|-----|---------|--|-----|-------|
| 1   | 2/17/88 | ADD FIRE DEPT. CHS. 3                      | KJE |       |
| 2   | 3-4-88  | REMOVED WATER LINE                         | KJE |       |
| 3   | 4/23/88 | ACCESS RANCHO DR. REV. EXIST. 16' PAVEMENT | TOB | RCA   |

DESIGNED BY: RLA/KJE  
DRAWN BY: HP7565B/LR  
CHECKED BY:  
DATE: JANUARY 1988